MATERIALS FOR THE STUDY OF BUSINESS

PRINCIPLES OF ACCOUNTING

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Principles of Accounting

BY

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EDITOR'S PREFACE

Collegiate training for business management is now so widely attempted that the time has arrived when experiments should be conducted looking toward the organization of the business curriculum into a coherent whole. Training in scattered "business subjects" was defensible enough in the earlier days of collegiate business training, but such a method cannot be permanent. It must yield to a more comprehensive organization.

There can be no doubt that many experiments will be conducted looking toward this goal; they are, indeed, already under way. This series, "Materials for the Study of Business," marks one stage in such an experiment in the School of Commerce and Administration of the University of Chicago.

It is appropriate that the hypotheses on which this experiment is being conducted be set forth. In general terms the reasoning back of the experiment runs as follows: The business manager administers his business under conditions imposed by his environment, both physical and social. The student should accordingly have an understanding of the physical environment. This justifies attention to the earth sciences. He should also have an understanding of the social environment and must accordingly give attention to civics, law, economics, social psychology, and other branches of the social sciences. His knowledge of environment should not be too abstract in character. It should be given practical content, and should be closely related to his knowledge of the internal problems of management. This may be accomplished through a range of courses dealing with business management wherein the student may become acquainted with such matters as the measuring aids of control, the communicating aids of control, organization policies and methods; the manager's relation to production, to labor, to finance, to technology, to risk-bearing, to the market, to social control, etc. Business is, after all, a pecuniarily organized scheme of gratifying human wants, and, properly understood, falls little, if any, short of being as broad, as inclusive, as life itself in its motives, aspirations, and social obligations. It falls

little short of being as broad as all science in its technique. Training for the task of the business manager must have breadth and depth comparable with those of the task.

Stating the matter in another way, the modern business manager is essentially a solver of business problems—problems of business policy, of organization, and of operation. These problems, great in number and broad in scope, divide themselves into certain type groups, and in each type group there are certain types of obstacles to be overcome, as well as certain aids, or materials of solution.

If these problems are grouped (1) to show the significance of the organizing and administrative, or control, activities of the modern responsible manager, and (2) to indicate appropriate fields of training, the diagram on the opposite page (which disregards much overlapping and interacting) results. It sets forth the present hypothesis of the School of Commerce and Administration concerning the basic elements of the business curriculum.

This present volume in the series is designed to acquaint the student with the functions and methods of accounting as an instrument of business control.

L. C. MARSHALL

BASIC ELEMENTS OF THE BUSINESS CURRICULUM

Control
1. Communicating aids of control, for example
   a) English
   b) Foreign language
2. Measuring aids of control, for example
   a) Mathematics
   b) Statistics and accounting
3. Standards and practices of control
   a) Psychology
   b) Organization policies and methods

Of problems of adjustment to physical environment
- a) The earth sciences
- b) The manager's relationship to these

Of problems of technology
- a) Physics through mechanics, basic, and other sciences as appropriate
- b) The manager's administration of technology

Of problems of finance
- a) The financial organization of society
- b) The manager's administration of finance

Of problems connected with the market
- a) Market functions and market structure
- b) The manager's administration of marketing (including purchasing and traffic)

Of problems of risk and risk-bearing
- a) The risk aspects of modern industrial society
- b) The manager's administration of risk-bearing

Of problems of personnel
- a) The position of the worker in modern industrial society
- b) The manager's administration of personnel

Of problems of adjustment to social environment
- a) The historical background
- b) The socio-economic institutional life
- c) Business law and government

AUTHORS' PREFACE

This text is designed to accomplish three things:

1. To give the prospective business manager a fairly definite idea of the type of service which can and should be provided by accounting as a measuring aid of business control.

2. To give him a working knowledge of the fundamental principles underlying the gathering, analysis, and interpretation of accounting data.

3. To give him at least an elementary knowledge of the technique employed in gathering accounting data, and in preparing the more generally used accounting reports.

If these three objectives are successfully attained, the text should not only be useful to the student in a collegiate school of business but should serve equally well as the basis of an introductory course in accounting for students from other departments of a university.

It should be understood that this text is not intended to furnish material for a full year's work in accounting. It is intended to give a survey of the accounting process, the presentation of which will extend over approximately one semester or quarter. A second volume, now in preparation, will show in some detail the application of the principles developed in this "survey" course to problems of internal management and budgetary control.

This text proceeds on the assumption that the primary function of accounting in modern industrial society is that of providing such statistical information for the various parties who exercise control over any business enterprise as will guide them in the exercise of this control. This idea is developed rather fully in the introductory chapter. Starting with this assumption, the student is led to see the need for the accounting reports, and is given an idea of the nature and form of the more widely used of these reports. The construction of the accounts, and the forms of accounting records used in recording and classifying the information which affects the accounts, are then considered as means of making available such items of information as will be required in the preparation of the accounting reports. The first sixteen chapters are intended to give the student an understanding of the nature of the "accounting process" as a whole. This first part of the book starts with a discussion of the reports and

develops the idea of the accounting process by proceeding from the reports to the ledger accounts, from the accounts to the books of original entry, from these forms of record to the vouchers, and thence to the business transaction. The second part begins with the transactions and the vouchers, proceeds to the books of original entry, thence to the accounts, with careful attention to their classification, construction, and interpretation, and finally to the use of the accounts in preparing the accounting reports. Thus the student is taken through the accounting process twice. The first time he starts by considering what it is that the accountant is trying to accomplish, and then develops the means by which this is to be accomplished. The second time he follows the process through in the order in which it actually occurs, giving considerably more attention than before to matters of procedure, form, and technique.

Since college students are presumably not studying accounting with the aim of becoming bookkeeping clerks, an effort has been made to reduce the amount of routine work demanded in the laboratory exercises to the minimum. At the same time, it has been the aim of the authors to make sure that every important principle developed in the text has been amply illustrated by means of laboratory exercises.

The questions at the end of each chapter are designed to aid the student in his study of the chapter, and also to be suggestive to the instructor in his guidance of the class discussion. The "References for Further Study" are intended for both instructor and students. It may be suggested, however, that in the earlier stages of his study of accounting the student is in some danger of being confused by an attempt to consider the points of view of too many writers.

The authors desire to make acknowledgment of the valuable assistance rendered by Mr. Robert Thorne, an undergraduate in the School of Commerce and Administration, who prepared the charts used in chapter xxxi. They desire also to acknowledge their indebtedness to Dean Leon Carroll Marshall of the School of Commerce and Administration, and to Mr. George E. Frazer, C.P.A., each of whom has exercised an important influence on the point of view and the method of approach adopted in the preparation of the text.

A. C. Hodge
J. O. McKinsey

School of Commerce and Administration
University of Chicago
October 1, 1920

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CHAPTER I

THE MEANING AND FUNCTION OF ACCOUNTING

Students of accounting are of different classes. In taking up the study of accounting it should be recognized at the outset that there is more than one field in which the student may later desire to use his knowledge of the subject, and that to make successful use of a knowledge of accounting in any one of these fields requires a training of a more or less specialized nature. The college and university students who present themselves for training in accounting may be divided into three rather broad groups, which may be defined as follows:

1. Those who study accounting with the aim of understanding its use as a means of social control over business activities. This group consists for the most part of students of economics, whose special interest is in the relation of government to business. It is probably the smallest of the three groups.

2. Those who expect eventually to qualify as certified public accountants and to follow the profession of public accounting, in which they will be called upon to deal with a wide range of accounting problems. This is typically a larger group than the first one.

3. Those who expect to become business executives of one kind or another, or to furnish specialized accounting service to the management of a particular business enterprise as a member of the organization rather than as a public accountant. This is probably much the largest of the three groups.

Fundamentals of accounting same for all classes. It is for the third of these groups that this introductory text in accounting is primarily designed. The primary object of schools of commerce in universities and colleges is to train men and women who will become business managers. It seems desirable that such students should be given a survey of the general field of accounting. They should be made familiar with the nature of the accounting process in general and with the broad underlying principles which are generally recognized as sound by practicing accountants and by writers on the subject. It will be

found, however, that a beginning course in accounting which furnishes the student with a satisfactory foundation for the continuation of his studies in any one special field of accounting will serve equally well as the basis for specialization in any of the other fields of accounting. If this text is successful in furnishing the business manager or managerial accountant with a proper approach to the subject, it should render an equally great service to the student who will eventually decide to offer his services to business owners and managers as a public accountant or auditor, or as a specialist in any line of accounting.

Accounting an instrument of business control. In the study of accounting, one should not expect to meet with any new and exclusive subject-matter. As in other courses in the field of business training, the scope of this course must be organized industrial society as a whole, with all of its institutions. The prospective business man and the instructor who tries to help train him are interested in this industrial society primarily on account of the manner in which its organization affects the nature of the problems which the business manager must meet. In order to deal successfully with his particular problems, the manager must have prepared for his use certain data in the form of reports, which will furnish him with information upon which to base his judgments. It is the function of accounting to prepare such reports and to provide the information which makes their preparation possible.

It is, then, with the use of reports as a means of business control that the student will be chiefly concerned in the general survey of the accounting field which he is now beginning. Under the old ideas of nomenclature, such a study probably would not be termed accounting in preference to statistics, but that is not a point which need cause the student any particular concern. Statistics is the technique of gathering, interpreting, and presenting in intelligible form information which is capable of being expressed numerically. The term is quite inclusive and, strictly speaking, accounting is merely a single phase of the employment of the statistical method. The attempts at classification, subdivision, and pigeonholing which have been made in the curricula as regards the field of statistics have served to obscure its relations to the uses to which it may be put rather than to clarify them. If it is desirable, as it probably is, to distinguish accounting from the general field of statistics, the demarcation is to be found partly in the nature

of the information dealt with, namely, the records of the particular business enterprise, and partly in the method employed in classifying that information, namely, the account, in the technical sense. It will appear, however, as the student proceeds in his investigations in the subject, that the reports prepared for the use of the various parties interested in the business are not all made up from information furnished by the accounts, so called, but in many cases are drawn from other kinds of records where the method of compiling the information is not peculiar to the field of accounting but is such as is employed in other kinds of statistics. For purposes of this text, then, it is not necessary or desirable that the student should attempt to narrow his concept of the field of accounting beyond that of the use of reports as an aid to the conduct of business, and incidentally an aid to the control and regulation by society of certain phases of private business enterprise.

Reports may be of various types. It may not be safe to proceed on the assumption that the student is clear as to the meaning of the word "report" as here employed. As a matter of fact, it is used in no peculiar sense, except that a written report is contemplated rather than an oral one. By a report, as used in connection with business management, is meant merely a statement of certain facts regarding the business, or regarding plans contemplated in the conduct of the business. This statement shows such analysis of the information presented as may seem desirable for the use of the party to whom the report is submitted, and is drawn in such form as seems most intelligible and enlightening. Such a report may be, for example, a statement of the financial condition of the business, as of a given date, submitted to the owners, to the creditors, or to a governmental agency. Or it may be a statement submitted by a subordinate manager to the general manager of a company, setting forth his plans for the coming year, or a statement showing the results of the operations for which he is responsible during the past year. Probably this will be clarified to some extent by the discussion which follows concerning the need of such reports in the modern business organization.

Reports useful to various interested parties. Assuming, on the basis of the above discussion, that the matter to be dealt with under the head of accounting has to do with the use of business reports, the next step is to consider from what various points of view data need to be gathered and reports prepared. Who are the parties that are

interested in the business, and what is the nature of their respective interests? The answer to this question may help to explain the great increase in demand for trained accountants which has been felt in the last few years.

Not more than fifty years ago the typical business organization was one with a relatively small amount of invested capital. This capital was in most cases contributed by a single individual or by a small and closely connected group. Its problems of management, judged by present standards, were not especially complex, and were dealt with by a single manager or by a small group who were responsible for all of the functions of the business enterprise, and who found little difficulty in being familiar with most of the details, or at least the significant details, of the business. Outside of the so-called "public utility" industries, it was rarely true that the scope of the business of any single organization was so wide as to affect vitally any large community interest, so that the public as a group had little concern with the regulation of the affairs of the business.

From all these circumstances it followed naturally enough that the reports required, and consequently the records necessary for their preparation, were of a fairly simple type, and were of interest to only a few persons. The conventional financial reports, setting forth the results of operations in terms of general financial condition and of profit and loss, were entirely adequate to the needs of the typical business enterprise of the period.

Increased size has meant greater complexity in business organization. It is needless to point out that very great changes have been taking place since the time when such conditions could be said to be representative. A large number of business enterprises have grown up, each of which represents a tremendously large capital investment, this investment usually being made on varying terms by a large number of individuals. Instead of the owners carrying on the management of the business themselves, as was formerly the typical case, it has become necessary for the management to be intrusted to subordinates, men of special training in their particular fields of management. A president or general manager is placed in charge of the entire business, being held responsible by the owners, and he in turn intrusts the carrying out of particular functions of the business to certain subordinate managers, who report to him, and whom he holds respon-

sible for the proper carrying out of their particular functions. Thus the president or the general manager might well have subordinate to him and reporting to him:

1. A sales manager, who would be in charge of the marketing of the products or services upon whose sale the business depends for its chief revenue. This sales manager would probably also have subordinates, as, for example, one in charge of domestic, and one in charge of foreign, sales. Subordinate to or co-ordinate with him, according to the organization, would probably be the advertising manager, with his staff.

2. A merchandise man, or manager in charge of purchases, in the case of a business which buys in a finished state the product which it sells. It would be the duty of this man to have general charge of the task of obtaining the goods which are to be sold, and he would have, in a large business, various subordinates who are specialists in certain types of merchandise purchasing.

3. A production manager in a manufacturing business who is responsible for supplying through production the product or service necessary to supply the demands of the customers. The purchasing of materials necessary for this purpose would be in charge of a general purchasing agent who might or might not be subordinate to the production manager, but who in any case must co-operate with him.

4. A financial manager, who is responsible for the formulation and execution of the financial policy of the business. Usually he is not given final authority in cases of great importance, but it is his duty to provide the information which will serve as a basis for formulating the financial policy of the business and to execute that policy after it has been formulated. Subordinate to the financial manager, who is sometimes called the treasurer or comptroller, there may be a credit manager and a collection manager. In any case there must be close co-operation between the financial manager and those who guard the credits of the firm.

5. Miscellaneous managers, such as superintendent of buildings, operating superintendent, employment manager, etc., whose titles indicate their duties.

The foregoing list of subordinates who assist the president or general manager in the formulation and execution of the policies of the firm is intended to be suggestive rather than inclusive. The

ones mentioned are those who are necessary to supervise and control the functions which are common to businesses in general.

It is not intended that the student shall gather from the foregoing that all businesses are so organized that one man is placed in charge of each of these fields. A single man may, of course, perform all of the functions suggested above, or they may be combined in any way that may be suggested by the size of the business and the special abilities of the men who are in the particular organization. Thus the president might be also the comptroller, while the sales manager might be in charge of the credits and collections.

Nature of reports affected by functional organization. It is not difficult to see that in a business organized along the lines indicated above, there would be need for reports for at least two purposes:

(1) To furnish each of the functional managers with information that would enable him to judge how well his subordinates were carrying out their duties, and to aid him in planning and carrying out his own duties in a successful manner. (2) To furnish the president or general manager with information which will enable him to evaluate the success of the work done by his subordinate managers in the period or periods covered by such reports. These reports should also supply him with such information as will furnish a basis upon which to plan for the conduct of business operations during the coming period, and to correlate the operations of the various subordinate managers in conformity to this general plan. For example, when he has considered the reports of past performances, and the plans and suggestions of the subordinate managers with regard to operations for the coming period in each of their fields, he may urge the sales manager to try for a volume of sales greater than that of the period just past. It is possible, also, that the difficulty of financing any greater volume of sales, as indicated by the financial manager's report, or the difficulty of securing the materials or labor necessary to keep up the quality of the product, as indicated by the report of the purchases manager or the personnel manager, might be so serious as to lead him to the conclusion that sales must be held at the level of the last period or even curtailed.

The gathering and interpreting of data for such reports as have been suggested here, namely, reports to aid in solving the problems of the internal management of the business, is really the primary

function of accounting. Accounting justifies itself in any organization carried on for purposes of making a profit only as it serves as an aid in maintaining the investment in the business and in earning an adequate return upon that investment. It is therefore upon the use of accounts as an aid to management that emphasis will be placed in this text.

Reports required by owners and prospective investors. While reporting for managerial purposes is the chief function of accounting, there are also other interested parties to whom reports must be submitted. The various parties who have investments in the business desire to be able to evaluate the profitableness of that investment and the desirability of continuing it or of adding to it. Also, it may be found desirable to interest additional investors and thus secure additional capital to extend the business and place it on a more profitable basis. Needless to say, the prospective investor would demand that information be furnished him which would give him some idea of the condition and earning power of the business before he would risk his funds by investing them therein.

Investments in the modern business enterprise are made on a variety of terms. Different classes of investors have different kinds of claims on the business, with respect to the amount of income they may expect, the guaranty for the payment of that income to them, the conditions under which their investment is to be returned to them, and the security which they have for the safety of the investment. Most of the students who read this text are familiar in a general way with the nature of the contract between the investors and the average corporation when the latter issues any of the usual types of securities. There are marked points of difference in the claims on both capital and income among the holders of the most common types of corporation securities, such as common stock, preferred stock, whether cumulative or non-cumulative, mortgage bonds, collateral trust bonds, equipment trust certificates, and so on.

It follows from all this that the accounts must be kept not only for the use of the internal managerial organization, but also in such a manner as to permit the preparation of reports that will set forth clearly the status of each of the different classes of investors, not only to protect the rights of each class in the distribution of net profit, but also to enable each to estimate closely the value of his investment or proposed investment.

Creditors require reports. Another class which is keenly interested in the financial and operating health of the business enterprise is that of the creditors. There are two chief kinds of creditors, besides the bondholders, who have been included among the investors, though strictly speaking they are really long-time creditors. The two kinds of short-time creditors are: (1) trade creditors and (2) commercial banks. Both classes typically require reports setting forth the financial condition of the concerns which apply to them for credit. Some commercial credit agencies and many banks have standard forms upon which applicants for credit are required to make reports. The emphasis in these reports is somewhat different from that in reports to owners and long-time creditors like bondholders, but on the whole they usually contain about the same information as the latter. Neither type of report presents anything like as difficult a problem in accounting as the first class mentioned, namely, the reports for managerial purposes.

The public an interested party. Such a business as we are discussing may be of such importance, owing to its size or to the nature of its product, that it involves a public interest in the way the business is carried on. There is nothing new or strange about this as applied to the so-called "utilities," such as the common carriers, the gas and electric companies, etc. In the case of these businesses it is recognized that the public is vitally concerned, and regulation is undertaken with the double purpose of making sure (1) that the service rendered is adequate and satisfactory in quality, and (2) that it is rendered at a reasonable rate. It is easy to see that no regulatory body could hope to accomplish much along the lines indicated unless they were furnished with reports showing the amount of investment in the company in question along with its earnings and expenses. Otherwise they would certainly be in no position to judge whether the company was earning enough to pay its investors a return sufficient to keep their capital in the business over a long period and to attract additional capital as it is needed in order to keep pace adequately with the demands of the public for the goods or services in question. As a result we find that practically every company of this character is required by some regulatory body to make reports on standardized forms at certain times. The records which must be kept in order to

prepare these reports are as a rule such as would serve well enough as a basis for the preparation of reports to investors or to creditors, but they would not furnish a sufficiently detailed analysis for purposes of managerial reporting.

The necessity of reporting to government agencies is not confined to the utilities, however, but extends now to practically every business enterprise. The requirements of reporting for the purpose of the income, excess-profits, and war-profits taxes have practically forced even the smaller businesses into some sort of record-keeping. During the war the interest of society as a whole in the individual business reached a point of development previously unknown. The raw materials and supplies used, the transportation facilities, the labor supply, the financing, the disposal of the product, and the rate of profit, all received the attention of the government as the exigencies of the war seemed to make it desirable. It is fairly safe to predict that in the future two things will be true as a result of this war-time regulation. In the first place, there will be a greater degree of government regulation of private business than in the past, necessitating for many businesses more complete records than they had formerly kept. Secondly, many small businesses, having had the matter of reporting forced upon their attention, will come to realize its importance and will in the future maintain more adequate systems of records and will make more use of reports within the business.

Summary of parties requiring reports. To summarize the discussion with regard to the various parties interested in the modern business and demanding reports prepared from the records kept in that business, these interested parties may be indicated as follows:

1. The managerial staff
   a) President, or general manager
   b) Sales manager
   c) Head merchandise man, or purchases manager (in a commercial business)
   d) Factory superintendent, or production manager (in a manufacturing business)
   e) Comptroller, or financial manager
   f) Other functional managers, varying with the organization of the business

2. Investors, present and prospective
   a) Stockholders, of various classes
   b) Bondholders, also of various classes
3. The creditors
   a) Trade creditors
   b) Commercial banks
   c) Other creditors
4. The government
   a) For regulation of the price
   b) For regulation of the quality
   c) For purposes of taxation
   d) For purposes of limitation on the amounts of certain materials and services that can be used
   e) For the protection of those employed—regulation of hours wages, working conditions, child labor, female labor, etc.

Accountant's task to gather data and prepare reports. The purpose of going into the foregoing discussion with regard to the parties who require reports on various phases of the modern business has been that of giving the student some idea of the increasingly broad field in which the accountant may work. Given a certain type of business organization, with certain relations to its investors, to its creditors, and to the public in general, it is the accountant's task to determine what forms of reports will best serve the various purposes for which reports are needed, to ascertain what data will need to be gathered to serve as a basis for the preparation of these reports, to design a system of records which will facilitate the gathering and necessary analysis of this data, and finally to prepare from the data thus gathered the reports and schedules determined upon. That this task is not an insignificant or an easy one will be realized by the student as he goes farther in the study of accounting.

To prepare him for this task several things are necessary: (1) He must acquire some insight into the nature of the problems in the solution of which the business executive may reasonably expect aid from the accountant. (2) He must have some idea of the type of information which will be helpful in solving these problems, and of the forms of reports in which this information may be presented. (3) He must understand the analysis necessary to make available the desired information, and the various possible bases upon which this

analysis may be made. (4) He must learn how to design forms of records which will enable him to provide for the recording of individual business transactions, evidenced by various types of business papers involved, in such a way as to make readily possible the analysis which has been decided upon as desirable.

Keeping in mind, then, the broad field that has been outlined above as the province of the accountant, the student must content himself for the present to deal with reports only as typified by certain simple and conventional kinds. These simple, conventional types will be studied, together with certain conventional types of records used in gathering the information needed for them, with the aim of familiarizing the student with certain more or less standard terminology and technique of accounting. If this aim can be successfully accomplished in the earlier part of the course, he will at that time have acquired not only this necessary technique but also some insight into the construction, meaning, and function of the reports as typified by the simpler forms which he has studied, and will be ready to proceed to more specialized problems.

QUESTIONS FOR CLASS DISCUSSION

1. In elementary courses in accounting there are usually three classes of students: (*a*) those who are interested in accounting as a part of a general business training; (*b*) those who are interested in accounting as an instrument of social control; and (*c*) those who desire to prepare for the professional practice of accounting. Should the preliminary training in accounting of all of these be the same or different? Why?
2. Explain and illustrate how accounting is related to business management.
3. The Brown Steel Company has its general offices in New York. It has ten subsidiary companies operating in ten different states. What is necessary in order to enable the general manager at New York to exercise control over the operations of the subsidiary companies?
4. In what way has the development of large business organizations affected the problem of business control or management?
5. Illustrate how this change in business management has affected the development and use of accounting.
6. What will be the probable tendency with reference to the need and use of accounting in the future? Give illustrations and evidence to support your answer.

7. Large companies sell their bonds and stocks in many markets and to many people. How do these purchasers determine the financial reliability of the firm issuing such bonds and stocks?
8. How does the credit manager of a wholesale business determine the financial condition and credit standing of the retailers who purchase from his company?
9. Explain and illustrate how the government may be interested in the business affairs of the individual business. In what way does the government obtain the information which it desires from such businesses?
10. State and illustrate some of the things which the accountant needs to know in addition to the technique of record keeping. Why does he need to know them?
11. How does accounting help to reduce the inevitable risks of modern business?
12. Why should a manager understand the technique of preparing accounting reports when he will not be called on to prepare them himself?

REFERENCES FOR FURTHER STUDY

Paton, W. A., and Stevenson, R. A., *Principles of Accounting*, chap. i.
Greendlinger, Leo, *Financial and Business Statements*, chap. i.
Mitchell, T. W., *Accounting Principles*, chap. i.
Wildman, John R., *Principles of Accounting*, chaps. i, ii, and iii.

CHAPTER II

THE RELATIONSHIP OF ACCOUNTING TO PROPRIETORSHIP

The basis of business management. In chapter i an attempt was made to give a view of the field of accounting in rather a broad way and to give some idea of the place of the accountant among those who exercise guidance in modern industrial society. In that connection it was pointed out that the primary function of the accountant is to make available for the various parties interested in the business enterprise such reports as are useful to them in the management or control of the business. In this discussion the principal emphasis was placed on the use of such reports as an aid to management, and it was seen that the special problems of management are very likely to be dealt with by a number of men, each a specialist in his particular line. The ultimate control of the business, however, is exercised directly or indirectly by the owner of the business or by the executive head, to whom the owner delegates certain powers. It is necessary, therefore, for accounting to give the owner or executive manager the information which he needs to manage his business. In order to understand how accounting may do this, it is desirable to consider the nature of the information which he should have.

The information which the owner of a business needs in order to manage it so that a profit may result may be classified as follows: (1) information concerning the property employed in the conduct of the business, i.e., the things which the owner uses in the carrying on of the business, such as cash, merchandise, furniture, land, buildings, etc.; (2) information concerning the operations he performs, i.e., the activities in which he engages, such as buying and selling goods and paying expenses.

It is customary, therefore, for the owner to request from his accounting department at the end of certain periods of time two reports or statements. The first sets forth the nature and value of the property which he is using in the business. The second furnishes

him with information concerning the operations which the business has performed, i.e., the things which it has done during the period and the result of these operations. The purpose of both of these reports is the same—to give the owner information which will enable him to manage his business in such a manner as to make a profit.

The first report indicates to the owner the property which he may use in the conduct of the business. The second report reveals to him the results of its use during the past period and from these results he can judge the best way to use it during the coming period. It can be seen, therefore, that these reports serve as a basis of management by the owner.

In the following chapters it is intended to consider the nature of the information which should be contained in these two reports which may be taken as typical of other reports to be considered later. Consideration will also be given to the form in which this information may be presented advantageously and to the types of records necessary to gather the data needed. and the methods employed in gathering these data and interpreting them for the purposes of the reports under consideration. It must be borne in mind that these two reports, while they are the ones most generally used, are typical of others which are equally useful in the proper management of the modern business. It is desirable, however, to postpone the detailed discussion of other forms until later, when the student will be better prepared to understand their uses and the technique of accounting involved in their preparation.

Business investment implies existence of assets and liabilities. In carrying on any business enterprise, a certain amount of property must be in use at any given time. In the terminology of the business world, such property is known as the assets of a business. An asset may be defined as any property of the owner which he uses or employs in the conduct of his business. This does not necessarily mean that it must always be in active use. Property may be held in the business for a time without being put to such use and still be counted as an asset to the business. The surplus funds may be invested in securities and even in real estate until the time when they are needed in the more active conduct of the business, but this property is still used to serve the purposes of the owner in the conduct of the business and is an asset. Thus, if W. A. Williams is conducting a retail store, the

assets of his business may include building and equipment, stock of merchandise, the amounts owed by customers, the bank balance, and anything else of value belonging to the business.

It often happens that the owner is not able to make a sufficiently large investment to enable the operations of the business to be carried on in the most profitable fashion. In such a case it becomes desirable to obtain from outside parties the additional property required. This is done by securing some form of credit. This credit may take the form of borrowing money for a long period, protecting the interests of the creditor by some sort of a lien on the assets of the business, and using the money to purchase the property needed. It may take the form of borrowing from the bank for a short time to supply a temporary need, or it may take the form of purchasing merchandise, supplies, property, or services with the privilege of deferring payment for a short time.

Obtaining property from others in any such manner results in giving the one who extends the credit a claim against the assets of the business. Such a claim is, from the point of view of the owner of the business, a liability. A liability may be defined for present purposes as a legally enforceable claim upon the assets of a business. It is a claim upon the assets in the sense that sooner or later it must be satisfied by turning over to the creditor a certain part of the assets, usually in the form of cash. For instance, if W. A. Williams purchases merchandise and supplies for which he promises to pay in thirty days, he incurs a liability, since those from whom he purchases have a claim on his assets until he pays for these goods.

Proprietorship. Therefore the owner in estimating the true worth of his property or assets invested in the business must always take into consideration the liabilities which are claims against these assets. If W. A. Williams, the retail merchant, employs in the conduct of his store cash to the amount of $1,500; merchandise to the amount of $3,600; show cases, counters, and store furniture worth $500; and equipment used in delivering goods to customers worth $400; he is using a total of $6,000 of assets in his business. If, however, he owes trade creditors $1,000, he must take this amount into consideration when he is thinking about his business. His net assets or the amount which he would have after paying his liabilities amount to only $5,000. This $5,000, or the difference between his assets

and liabilities, is known in accounting as his net worth or proprietorship. It represents the interest of the owner in the business. Reporting with regard to proprietorship and the records necessary for such reporting are of great importance in accounting and will receive considerable attention in the following chapters.

Object of business operations to increase proprietorship. To understand better the importance of proprietorship it may be well to give some further consideration at this point to its nature and significance. It should have been made clear that it is the excess of total assets over total liabilities and represents the net investment of the owner or owning group. Any increase in the amount of proprietorship which takes place during a given period, exclusive of any additional investment which may be made during that period by the owner, is known as the net income of the business for the period. In case such net income is earned by the business, it is then possible for the owner to withdraw from the business for his private use assets to the amount of such increase in proprietorship without thereby impairing his original investment. It is only through net income that the return to the owner, which is his inducement for making the original investment, is made possible. The disposal of this excess of assets over liabilities is of course optional with the owner. He may withdraw it all or any part of it, or he may allow all or any part of it to continue in use in the operations of the business. In any case, he has increased the amount of his ownership. He has realized a profit, and this is the object of his investment.

In the illustration given under the discussion of proprietorship, W. A. Williams is using $6,000 of property in operating his grocery store. Others have a claim against this property for $1,000, therefore his interest or ownership in the business amounts to $5,000. If a year later the total property invested in the business amounts to $8,000 and his liabilities amount to $2,000, he has an interest in the business of $6,000, or $1,000 more than at the beginning of the year.[1]

It need scarcely be pointed out that the main object of the owner in conducting the business is to increase the amount of proprietorship

[1] He may withdraw this $1,000 from the business and the business will be in the same condition as at the beginning of the year, or he may decide to leave it in the business, hoping that by the use of the additional $1,000 of property he may increase his proprietorship during the coming year more than during the past year.

at as rapid a rate as possible, since that is the motive back of business enterprise under our present economic organization. The information desired by the owner with reference to the business, therefore, will be such as will enable him so to manipulate the assets and control the liabilities as to earn the highest possible rate of profit, or increase, in proprietorship. It is the primary object of accounting, therefore, to give this information.

Proprietorship the excess of assets over liabilities. As previously indicated, the amount of the owner's interest or his proprietorship can be obtained at any time by subtracting the total amount of his liabilities from the total amount of his assets. To take a more detailed illustration than the one given above, the assets of W. A. Williams may be as follows: Cash, $1,500; debts due from customers to whom merchandise has been sold on credit, $3,040; merchandise on hand, $3,500; office and store furniture and equipment, $450; delivery equipment, $640. By adding the above items it will be seen that the total assets of Williams will amount to $9,130. If he owes creditors from whom he has purchased merchandise $1,500, his liabilities are $1,500 and his net worth or proprietorship $7,630.

The assets, liabilities, and proprietorship of Williams may be shown by the following statement:

ASSETS		
Cash	$1,500.00	
Debts owing from customers	3,040.00	
Merchandise on hand	3,500.00	
Furniture and fixtures	450.00	
Delivery equipment	640.00	
Total assets		$9,130.00
LIABILITIES		
Debts to merchandise creditors		$1,500.00
Net worth of proprietorship		$7,630.00

Such a statement as this is valuable to the owner from more than one point of view. First, it shows him the amount of his net worth so that he can tell whether his investment has been increased or impaired. Secondly, it shows him the amount and nature of the

assets in the business and the amount and nature of the liabilities. Such a statement may be used by the owner, not only to determine the status of his investment, but also to aid him in planning such a policy for the future conduct of the business as seems likely to bring about further increases in proprietorship. Only a small part of the work of the accountant lies in showing what has taken place and the condition resulting from past operations. It is necessary to show this, but the real object in so doing, from the point of view of management, is to aid in the planning of future operations. Accordingly a statement showing the amount and kind of assets, the amount and kind of liabilities, and the amount and kind of proprietorship should furnish the owner with such information concerning the nature of the assets and the claims against them as will suggest certain possible courses of action in handling them during the coming period of operations.

Proprietorship may assume various forms. The foregoing discussion of proprietorship has used as an example the single proprietorship business, which is the form involving the fewest legal complications. Besides the single proprietorship, however, a number of other forms of proprietorship have been used, most of which can still be found in use. The forms of proprietorship which are in common use today may be divided into three main types, which may be represented by: (1) the *single proprietorship*, (2) the *partnership*, and (3) the *corporation*. For this reason it is desirable to discuss briefly certain of the characteristic features of each of these three forms of proprietorship.

Single proprietor needs reports for control. In the case of a business owned by an individual proprietor, there is usually a distinction to be made by the accountant between the proprietor's net ownership in the business and his property interests outside the business. The report made by the accountant on the status of the investment in a given business enterprise will deal only with the assets used in carrying on that business, the claims of creditors upon those assets, and the resulting net worth of the owner or owners. For purposes of control by the owner it is important that the facts shown should be so limited. The proprietor should be able to judge of the relative success of his business, or of each of several businesses which he may own, by comparing the amount of the changes in proprietorship with the

amount of his net investment in each such enterprise. If he has the information which will enable him to make such comparisons, he is in a position to decide intelligently what course of action will be likely to prove most profitable with regard to a given business. His decision may be to continue the present investment, to add to it, to withdraw a part of it, or to withdraw it altogether as soon as is practicable. In any case it is desirable that he should be aided in reaching his decision by a separate report on each business enterprise in which he is interested as an owner.

At the same time, so far as his creditors are concerned, there is little if any reason for such distinction, since the law does not recognize any business undertaking of a single proprietor as an entity separate from his ownership in other capacities. All his creditors, whether they are creditors of a business owned by him or creditors of the proprietor in his private capacity, may consider all his assets, no matter how they are invested, as a common fund to which they may look for the satisfaction of their claims.

Partnership form involves additional considerations. The principle involved in recording the proprietorship of a partnership is no different from that involved in the individual proprietorship. The only difficulty here is in keeping distinct the respective investments of the two or more partners. Their respective share in the proprietorship may of course be decreased by withdrawals or increased by additional investments, and will be increased or decreased by the rise or fall in amount of the net assets of the firm, in proportions previously determined by the partnership agreement.

The law does not recognize a partnership as a legal entity, but recognizes only the individuals who are associated in the partnership, and their legal rights and duties as regards their relations to one another and to others. In the ordinary partnership, the creditors may look not only to the business assets but to the property of the individual partners outside the business, just as in the case of an individual proprietor.

In the case of the partnership, however, the partnership creditors must, in case of insolvency, use up the partnership assets before turning to the individual property of the partners held outside the partnership, and conversely, the personal creditors of the partners must content themselves with the assets of the individual partner

outside the partnership holdings until these are exhausted, before turning to the firm assets.

There are a number of peculiarities and problems that arise in actual practice in dealing with the records of a partnership, which belong peculiarly to that form of organization, and which arise in very large part out of the nature of the partnership agreement, but it is scarcely worth while to take these up at this point, as they can be better treated somewhat farther on when the student has more knowledge of the technique of accounts.

Corporation typically a modern form. The corporation as a form of business organization is a creation of statutory law, a form which has been gradually developed to its present status by the needs which have arisen with the development of the industrial order. The modern industrial order has made necessary the employment of very large amounts of invested capital, and this fact has made certain features of organization desirable, if not indeed essential. A form of organization was needed in which (1) capital contributions could be secured in varying amounts from a great variety of sources, (2) the investor should not be liable to creditors of the concern to the full extent of his private fortune, (3) control and management, while vested in the last analysis in the owners, could be delegated to a centralized group, the members of which should be chosen for their special ability to deal with the peculiar problems in the particular business in question, and in which (4) any owner who desired to withdraw his investment from the business could do so simply by transferring all or any part of his investment to another person without in any way disorganizing the business.

In attempting to meet these needs the modern corporate form of business organization has been developed. It is a legal entity and has a separate existence as a legal person apart from any of its owners, with practically the rights, from a business point of view, which are enjoyed by any citizen. The corporation as it now exists is not to be taken as the last word in business organization. There are still some problems relating to the financing of the business enterprise and to the protection of the various interests involved which have not been satisfactorily worked out under the corporate form of organization. Whether the needed reforms will eventually come about through a modification of the present corporation laws or through a different

form of organization is at present scarcely a profitable subject for discussion.

The ascertainment of proprietorship in a corporation involves exactly the same issues as in the individual proprietorship. The only difficulties that arise in showing it in the case of the corporation arise from the fact that the owners are numerous and their investments are often made on varying terms. There may be several groups among them, each having an interest in the total proprietorship that differs in some way from that of the other groups. It is not desirable to enter into any further discussion of the problems thus arising, since they will be handled later and since for the present the principles of proprietorship may be quite amply illustrated by the use of illustrations drawn from the business of a single proprietor.

Summary. The point of primary importance for the student to bear in mind at the present time is that the function of accounting is to provide information which can be used by those in charge of the management of the business to increase the proprietorship interest, whether that interest be vested in an individual, a partnership, or a corporation. It is also important for the student to understand that the purpose of such a report as that discussed in the preceding paragraphs of this chapter is to present this information in a form which makes it readily understandable and usable on the part of the management. It will be the purpose of the following chapters to discuss more in detail the construction and interpretation of this statement of assets and liabilities which in accounting is called the balance sheet.

QUESTIONS FOR CLASS DISCUSSION

1. Mr. Brown lives in New York. He owns a store in Chicago which is under the management of Mr. Smith. What information will Mr. Brown require at the end of the year to judge the efficiency of the management of Mr. Smith? How will he obtain this information?
2. Explain and illustrate the meaning of "asset." Give five assets which the following businesses might use: (*a*) grocery store; (*b*) bank; (*c*) department store; (*d*) automobile factory; (*e*) wholesale jewelry house.
3. J. H. King invests $10,000.00 in cash in a retail store. He finds that he needs additional funds with which to finance his business. How may he obtain these funds? What effect will the obtaining of these funds produce on the financial condition of King?

4. From the records of James Reynolds, retail merchant, the following items are copied:

1.	Land	$2,000.00
2.	Due from James Long	300.00
3.	Owed to John King	400.00
4.	Office furniture	800.00
5.	Cash	500.00
6.	Owed to bank	1,000.00
7.	Due from W. E. Atkins	200.00
8.	Owed to L. S. Lyon	300.00
9.	Merchandise on hand	2,500.00
10.	Owed to Reighard & Co.	600.00
11.	Delivery equipment	1,200.00
12.	Buildings	1,300.00

Classify these items so as to show which represent assets and which liabilities.

5. Arranging in proper order the items given in Question 4, determine the net worth of proprietorship of James Reynolds.
6. If one year later the assets of Reynolds have increased $3,000.00 and his liabilities have increased $2,000.00, what effect will this have on his proprietorship?
7. Will he regard this change in proprietorship as favorable or unfavorable? What effect may this change in proprietorship have on his plans for the next year?
8. If Reynolds' assets increase $3,000.00 and his liabilities increase $4,000.00, what effect will this have on his financial condition? What effect may it have on his plans for the next year? What does it indicate with reference to the efficiency of the management of Reynolds?
9. In what different types of business organization may the proprietorship of a business be vested? State briefly the most important characteristics of each from the point of view of business management.
10. In what way does the form of proprietorship affect the reporting requirements of the business?
11. "The owner directly or indirectly exercises control of the business." Can this statement be justified in connection with each type of ownership?

REFERENCES FOR FURTHER STUDY

Stockwell, H. G., *Net Worth and the Balance Sheet*, chap. i.
Wildman, John R., *Principles of Accounting*, chap. vii.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chaps. ii and iii.

LABORATORY EXERCISE NO. 1

Illustration of Statement Showing Proprietorship

January 1, 1919, Howard Reed entered the retail grocery business with an investment of $3,550.00 in cash. On December 31, 1919, he was employing in this business the following property:

Cash		$1,300.00
Notes receivable		200.00
Accounts due from customers:		
A. B. Trudeau	$450.00	
J. F. Holmes	220.00	
F. M. Wright	275.00	
W. C. Harvey	125.00	
Total		1,070.00
Merchandise inventory		1,075.00
Furniture and fixtures		500.00
Delivery equipment		1,500.00

He was indebted to trade creditors as follows:

W. B. Smith & Co.	$250.00	
E. B. Curtis	400.00	
Wood Brothers	275.00	
Total		$925.00

The Citizen's State Bank hold his promissory note for $500.00.

There have been no withdrawals of property during the year.

Instructions:

Prepare a statement which will show the amount of Howard Reed's proprietorship as of December 31. (Show "Accounts receivable" and "Accounts payable" each as a single item, omitting the detail of the items composing each.)

What answer does this statement give to the following questions:

1. Has the original business investment been maintained?
2. Has a return on the investment been realized, and if so, what is the amount of such return?

LABORATORY EXERCISE NO. 2

Illustration of Statement Showing Proprietorship

On January 1, 1919, Milton Jones invests $5,500.00 in the retail store business. On December 31, 1919, his assets and liabilities are as follows:

Due to bank	$2,000.00
Cash	850.00
Furniture and fixtures	750.00
Accounts payable	1,500.00
Delivery equipment	600.00
Building and land	2,000.00
Merchandise inventory	3,100.00
Accounts receivable	2,700.00
Notes of customers	200.00

Instructions:

Prepare a statement showing the proprietorship of Jones as of December 31, 1919.

Has the investment been impaired or increased by the operations of the period? What has been the rate of return on his invest ent?

LABORATORY EXERCISE NO. 3

Illustration of Statement Showing Proprietorship

The Jones Mercantile Company is organized July 1, 1919, for the purpose of conducting a small department store with a cash investment of $100,000.00. On December 31 of that year the company has the following assets:

Cash	$ 5,000.00
Accounts receivable	35,000.00
Notes receivable	10,000.00
Merchandise inventory	25,000.00
Equipment	20,000.00
Building and land	55,000.00

The Company owes its trade creditors on account $15,000.00 and has notes payable outstanding to the amount of $20,000.00.

Instructions:

Prepare a statement showing the total proprietorship of the Jones Mercantile Company on December 31, 1919.

According to this statement, what is the proprietorship on December 31 of a member of the company who contributed one-tenth of the original investment?

CHAPTER III

THE BALANCE SHEET

The function of the balance sheet. In the preceding chapter some consideration was given to a simple form of statement showing the assets, liabilities, and proprietorship of a business enterprise. A statement of this nature in connection with any business is known as a balance sheet. From the point of view of the owner or manager, the balance sheet serves two important purposes: (1) It enables him to see whether his original investment has been maintained and whether any additions have been made thereto. This assists him to evaluate past results. (2) It enables him to plan to use his assets and control his liabilities in the future in such a manner as to increase his proprietorship.

So far, this form of statement has been discussed only with respect to the information given to the owner. The student will recall, however, that in the first chapter it was pointed out that there are parties other than the owner and his subordinate managers who have an interest in the business enterprise and that the information furnished by the accountant must also include information which will be useful to them in forming judgments with respect to the business. Those other interested parties, as there indicated, are: (1) the creditors and prospective creditors, both long time and short time, including banks, trade creditors, bond holders, and other holders of long-time claims; and (2) the government, which may desire information to serve as a guide in taxation or regulation, or both.

The balance sheet is the statement most frequently used in furnishing information to interested parties outside the business, since it contains information which, if clearly set forth and properly interpreted, is of the greatest value to them. It should, however, be supplemented by a statement of the results of current operations; which will be discussed later. The primary purpose of the balance sheet is to aid the owner. However, the information desired by the owner, if it is to be adequate to his needs, will be sufficiently inclusive

to serve the needs of the other interested parties as well. It is therefore as a report to the owner that the balance sheet will be considered for the present.

The form of the balance sheet. Since the purpose of the balance sheet is to give the owner the information which he needs to manage his business, this information should be given in the most usable form. The balance sheet shows three main items: assets, liabilities, and proprietorship. The simplest form of the balance sheet, therefore, would be one which showed these in total.

If the total assets of W. A. Williams are $9,130, his total liabilities $1,500, and his proprietorship $7,630, his balance sheet might be made in the following form:

Assets	$9,130.00
Liabilities	1,500.00
Proprietorship	$7,630.00

Such a statement would give Williams information of some value, since by comparing it with previous statements he could see whether his proprietorship had increased or decreased and thereby judge the success of his business in terms of profit and loss. However, he wants more information than this, since he desires to know the nature of his assets and liabilities, as well as their amount. It follows that the assets and liabilities should be shown as several items and not merely as totals only. In chapter ii it was suggested that W. A. Williams might ascertain his proprietorship by listing his assets and liabilities as follows:

ASSETS		
Cash	$1,500.00	
Debts owing from customers	3,040.00	
Merchandise on hand	3,500.00	
Furniture and fixtures	450.00	
Delivery equipment	640.00	
Total assets		$9,130.00
LIABILITIES		
Due to merchandise creditors	$1,500.00	1,500.00
Proprietorship		$7,630.00

Such a statement as this has advantages over the form suggested, in which only totals are shown. By listing the different kinds of

assets and liabilities separately the owner is given information regarding the nature and relationships of the various items which would aid him in determining whether or not the business is proceeding along sound lines, and also in planning for the future.

In listing the foregoing items, the terms employed in designating the particular assets and liabilities are those which might be used by a person who does not know the generally accepted terminology of accounting. There is among the accounting fraternity a certain body of terminology which is generally accepted, especially when applied to the more common kinds of assets and liabilities. In order to see how the terms in accounting would be applied in a statement containing the above information, it is desirable to discuss separately some of the items appearing on the balance sheet of W. A. Williams.

Debts owed by customers. The debts owed by customers consist of promises to pay which they have given in exchange for merchandise. These promises may be written or they may be oral. If a customer gives his written promise to pay drawn in a legally valid form, this is known as a note and is classified under the head of "notes receivable." If his promise to pay is oral, or implied from the fact that he orders goods from the business, he is said to owe the business on open account and the asset constituted by this claim is classified as an "account receivable." The claims of the business against its customers are ordinarily classified under these two headings.

In the foregoing illustration there is listed as due from customers $3,040. In a retail store such as that of W. A. Williams, it would be quite unusual for written promises to be given in payment of merchandise. Probably the only conditions under which such written promises would be received would be when a customer failed to pay his oral promises at a specified time and gave a written promise in order to obtain extension of time. Such customers would be regarded as undesirable and therefore a large item of notes receivable would be looked upon with suspicion. If it is assumed in the case of W. A. Williams that he has written promises to the amount of $100 and oral promises of $2,940, these debts of his customers would be listed on his balance sheet as follows:

Notes receivable	$ 100.00
Accounts receivable	2,940.00

Although few written promises or notes, as they are called by business men and accountants, are received by retail stores, in some lines of business it is customary to receive written promises in payment of goods. A large item of notes receivable on the balance sheet of such businesses would not, therefore, be regarded as unfavorable. This will be discussed more fully in a subsequent chapter.

It is not worth while at this point for the student to concern himself with the nature and form of the written promises discussed above. These will be considered in subsequent chapters. It is sufficient at present to know that such written promises are used in the conduct of a business; that they are called "notes receivable" when in favor of the business; and that they constitute an asset of the business.

The oral promises to pay which are received from customers are shown on the balance sheet as a total. In the accounting records, the amount due from each customer is shown. It is not desirable, however, to show on the balance sheet the name of each customer who owes the business. Sometimes a list of the customers and the amount each owes is attached to the balance sheet. The illustration on page 29 shows a list of the creditors of W. A. Williams. A similar list might be made of the customers who owe him, but such a list is usually omitted because of the large number of such customers.

Merchandise on hand. The merchandise on hand at the time the balance sheet is made is known as the merchandise inventory. It is usually obtained by making a physical count of the goods on hand and determining their value at cost price. If, however, the current market price is less than cost price, the market price should ordinarily be used in determining their value. The value of the merchandise inventory is shown as an asset on the balance sheet.

Debts owed merchandise creditors. It is explained above that those who purchase merchandise from the business may give either written or oral promises in payment. In the same manner the business may give either written or oral promises in payment of the merchandise purchased from others. The written promises so given are known as "notes payable" and the oral promises as "accounts payable." In the illustration given, W. A. Williams owes creditors $1,500 and it may be assumed that $200 of this amount is represented by written promises and $1,300 is represented by oral promises,

in which case his debts to creditors may be shown on the balance sheet as follows:

Notes payable to creditors	$ 200.00
Accounts payable	1,300.00

The accounts payable, like the accounts receivable, are shown on the balance sheet as a total. Although the accounting records show the amount due to each creditor, it is not desirable to show the names of each creditor on the balance sheet. Sometimes a list of the creditors and the amount due each is attached to the balance sheet. Such a list of the creditors of W. A. Williams might be as follows:

List of Accounts Payable—December 31, 1918

Chicago Wholesale Grocery Co.	$ 300.00
Quaker Oats Co.	100.00
Rollen Mills Co.	200.00
E. C. Cline & Co.	400.00
E. R. Taylor Grocery Co.	180.00
A. M. Anderson Wholesale Co.	120.00
	$1,300.00

The balance sheet with accounting terminology. After the foregoing discussion it is possible to restate the assets and liabilities of W. A. Williams, using approved accounting terminology in describing them. Such a statement would be as follows:

ASSETS		
Cash	$1,500.00	
Notes receivable	100.00	
Accounts receivable	2,940.00	
Merchandise inventory	3,500.00	
Office furniture	450.00	
Delivery equipment	640.00	
Total assets		$9,130.00
LIABILITIES		
Notes payable to merchandise creditors	$ 200.00	
Accounts payable	1,300.00	
Total liabilities		1,500.00
Proprietorship		$7,630.00

Methods of determining the value of certain assets. The balance sheet shows, among other things, the value of the assets in the business. In order that the balance sheet may be of the greatest value to the owner as well as to others who may be interested in the business, it is necessary that these values be stated as accurately as possible. It is from the balance sheet and other such reports that the information is obtained which serves as a basis of judging past results and of making future plans. Judgments and plans based on inaccurate information are dangerous. The values on the balance sheet should therefore be stated accurately.

To determine the value of some assets is quite easy. It is only necessary to refer to the accounting records and see the values at which they are recorded. It can be easily seen that, if all cash received by the business is recorded in one place and all cash paid out in another, the difference between the totals recorded in the two places will give the total of the cash on hand. To obtain the amount of the cash item on the balance sheet is therefore a relatively easy matter. However, there are some assets the correct value of which is not shown in the accounting records until certain adjustments or changes have been made. It must be ascertained, therefore, what these assets are and how their value is determined.

It may be assumed that W. A. Williams purchased on January 1, 1918, furniture and fixtures costing $500 and delivery equipment costing $800. If Williams uses during the year the furniture and fixtures which cost $500 at the beginning of the year, it is evident that they are not worth $500 at the end of the year. He may not know the exact amount they have decreased in value, but he probably knows from the experience of himself and others that such furniture and fixtures will be worn out in ten years and consequently he estimates that they have decreased in value during the first year one-tenth of their original value, or $50. This estimated decrease in value of the furniture and fixtures may be deducted from their cost value of $500 and this asset will then be listed on the balance sheet as $450. Since, however, the $50 represents only the estimated decrease in value of the asset and an adjustment may have to be made later, it is thought by accountants and business men to be desirable to show the original cost of the asset with the decrease in value subtracted therefrom. The decrease of value of an asset because of its

use in the business is known as depreciation, therefore the $50 allowance for the decrease in the value of the furniture and fixtures might be termed "an allowance for depreciation." But, in accounting, such estimates of the decrease in value of fixed assets are known by the technical term of "reserves." Therefore the allowance for depreciation on furniture and fixtures may be deducted from the asset and may be shown on the balance sheet as follows:

Furniture and fixtures	$500.00	
Less reserve for depreciation of furniture and fixtures	50.00	
		$450.00

Delivery equipment also decreases in value by use in the business, and consequently an allowance for its depreciation should be shown on the balance sheet. If Williams has delivery equipment valued at $800 at the beginning of the year and he estimates that it will last for five years, he should make an allowance of $160 each year for its depreciation. Accordingly at the end of the first year he may show the delivery equipment on the balance sheet at $640 and not show the depreciation as a separate item. A better method of showing it, however, is as follows:

Delivery equipment	$800.00	
Less reserve for depreciation of delivery equipment	160.00	
		$640.00

Heading or title of the balance sheet. The balance sheet is made to show the financial condition of the firm at a given date. It is customary, therefore, to place the name of the firm and the date of the balance sheet as a heading somewhat as follows:

W. A. WILLIAMS

BALANCE SHEET—DECEMBER 31, 1918

Sub-titles of the balance sheet. The assets of all mercantile firms can be divided into at least two classes: (1) Those in the form of cash or those which it is anticipated will be converted into cash in the near future in the regular operations of the business. In accounting, these are termed "current" assets. (2) Those which are used

rather more permanently in the conduct of the business and which it is not anticipated will be sold or turned into cash. In accounting, these are called "fixed" or "permanent" assets.

By looking at the balance sheet of W. A. Williams it will be seen that he has cash to the amount of $1,500; debts due from customers which he expects to collect in the near future to the amount of $3,040; and merchandise on hand to the amount of $3,500, which he plans to sell and realize in cash within a reasonably short period of time. Consequently he has current assets to the amount of $8,040. In addition he has $450 of office furniture and delivery equipment valued at $640. These assets he expects to retain in his business and does not expect to liquidate in cash. His fixed assets, therefore, amount to $1,090.

In a similar manner the liabilities of a firm may be divided into two classes: (1) Those which the business has promised to pay within a short time after they were incurred, such as debts due to merchandise creditors and to banks. These are called "current" liabilities. (2) Those which are of long-time duration and may not have to be paid until several years after they are incurred. These are known as "fixed" or "permanent" liabilities. Such liabilities will be discussed in future chapters.

It will be seen by the balance sheet of W. A. Williams that his only liabilities are those to merchandise creditors, which amount to $1,500. According to good business practice these will be paid in the near future, so they are current liabilities. Williams has no long-time obligations, so no fixed liabilities are shown on his balance sheet.

In addition to the assets and liabilities, the proprietorship or net worth of the business is shown on the balance sheet. This is shown under the separate heading or title of "proprietorship," "net worth," "capital," or some similar term.

Since the purpose of the balance sheet is to give as much information as possible concerning the assets and liabilities of a business, it is desirable to classify the assets and liabilities according to their nature. The method of showing these classifications is illustrated in the balance sheet given in the next paragraph. Frequently subdivisions of assets and liabilities additional to those discussed above

are shown on the balance sheet, but those given are sufficient for the present discussion. The others will be considered in subsequent chapters.

Illustration of the standard form of balance sheet. Using the items and amounts previously given, a balance sheet may be made for W. A. Williams, which will comply with the accounting principles discussed above, in the following form:

W. A. WILLIAMS

BALANCE SHEET—DECEMBER 31, 1918

ASSETS			
Current assets:			
Cash		$1,500.00	
Notes receivable		100.00	
Accounts receivable		2,940.00	
Merchandise inventory		3,500.00	
Total current assets			$8,040.00
Fixed assets:			
Office furniture	$500.00		
Less reserve for depreciation	50.00	$450.00	
Delivery equipment	800.00		
Less reserve for depreciation	160.00	640.00	
Total fixed assets			1,090.00
Total assets			$9,130.00
LIABILITIES			
Current liabilities:			
Notes payable to merchandise creditors		$ 200.00	
Accounts payable		1,300.00	
Total current liabilities			1,500.00
PROPRIETORSHIP			
W. A. Williams, proprietor			$7,630.00

A balance sheet such as this one is said to be in the "report" form. While this arrangement correctly shows the financial condition of a business, accountants more frequently use the form given below, which is known as the "account" form:

W. A. WILLIAMS

Balance Sheet—December 31, 1918

ASSETS			
Current assets:			
Cash . . .	$1,500.00		
Notes receivable . . .	100.00		
Accounts receivable .	2,940.00		
Merchandise inventory.	3,500.00		
Total Current assets			$8,040.00
Fixed assets:			
Office furniture .	$500.00		
Less reserve for depreciation . .	50.00	$450.00	
Delivery equipment . .	$800.00		
Less reserve for depreciation . .	160.00	640 00	
Total fixed assets . .			1,090.00
Total assets			$9,130.00

LIABILITIES		
Current liabilities:		
Notes payable to merchandise creditors	$200.00	
Accounts payable. . . .	1,300.00	
Total current liabilities		$1,500.00
PROPRIETORSHIP		
W. A. Williams, proprietor		$7,630.00
Total liabilities and proprietorship.		$9,130.00

The student will notice that both these balance sheets show the same facts. It is only the arrangement that is different. Both are according to good accounting practice, but the latter form is, at present, used much more frequently by accountants in their reports. In the printed forms given by banks to customers, on which to report their financial condition, the first form is quite frequently called for by the arrangement of the items or the printed blanks. So far as

the owner of a business is concerned either form serves his purpose equally well.

QUESTIONS FOR CLASS DISCUSSION

1. H. M. Friedman, of Kansas City, Mo., desires to purchase on account $1,000.00 of merchandise from Carson, Pirie & Scott of Chicago. What information would Carson, Pirie & Scott desire to obtain concerning H. M. Friedman before they ship the merchandise to him? How would they obtain this information?
2. You are working for the First National Bank. J. C. Adams, retail merchant, requests the bank to loan him $500.00. The credit manager of the bank instructs you to investigate the financial condition of Mr. Adams and report to him whether you think the loan should be granted. You request Mr. Adams to give you a balance sheet. Give the items which you would expect to find on the balance sheet of Mr. Adams.
3. On the balance sheet of Mr. Adams there appear the following items:

Notes receivable	$3,000.00
Accounts receivable	1,000.00

   What might you infer from the fact that notes receivable are three times as large as accounts receivable? Would you regard this as favorable or unfavorable?
4. The Ford Motor Company produces automobiles. It owns its factory. machinery, and equipment. The Jones Company is engaged in the retail dry-goods business. It rents the building in which its business is conducted, but owns the furniture and equipment in the store. In what ways will the balance sheets of these two firms differ?
5. H. B. Johnson, retail merchant, presents to his bank the following balance sheet:

FINANCIAL STATEMENT—SEPTEMBER 30, 1920

Bills receivable . .	$ 400.00	Net worth . . .	$6,800.00
Delivery equipment .	800.00	Due to creditors .	2,800.00
Cash	1,000.00	Bills payable . . .	3,200.00
Furniture and fixtures	600.00		
Due from customers	4,800.00		
Merchandise . .	5,200.00		
	$12,800.00		$12,800.00

   Explain how this balance sheet should be changed so as to provide more information and to correspond to current accounting practice.

6. R. E. Taylor submits to his bank in asking for credit a balance sheet dated December 31, 1917. Upon examination it is seen that no allowance has been made for depreciation of fixed assets. You are instructed by the credit manager of the bank to make an inspection of the records of Taylor to determine the amount which should be deducted on the balance sheet. Explain what information you would need in order to determine the amount of this reserve.
7. H. M. Jones submits to his bank a balance sheet made as follows:

H. M. JONES

BALANCE SHEET—JUNE 30, 1918

Current assets	$15,000.00	Current liabilities	$ 7,000.00
Fixed assets	10,000.00	Proprietorship	18,000.00
	$25,000.00		$25,000.00

You are asked by the bank to explain to Mr. Jones how this balance sheet should be revised so as to give the information which the bank desires. What instructions would you give to Mr. Jones?
8. Mr. Jones has a great many customers who owe him. How will the amount which they owe be shown on the balance sheet? If it is desired to know the name of the individual customers and the amount each owes, how may this be shown?
9. Explain and illustrate the difference between current and fixed assets; between current and fixed liabilities.
10. What is the distinction between the "report" and the "account" form of the balance sheet?
11. What should be contained in the heading of the balance sheet? Why?

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chaps. iv and v.
HATFIELD, H. R., *Modern Accounting*, chap. iii.
STOCKWELL, H. G., *Net Worth and the Balance Sheet.*

LABORATORY EXERCISE NO. 4

ILLUSTRATION OF THE BALANCE SHEET

C. A. Ankromn, who is engaged in the retail implement business, has on January 1, 1919, the following assets and liabilities:

Cash	$ 800.00
Notes receivable	220.00

Accounts due from customers:	
O. T. Gooch	$190.00
John K. Dew	55.00
W. E. Hampton	50.00
R. E. Taylor	75.00
D. D. Dwyer	120.00
H. L. Cohagen	250.00
Merchandise inventory	2,000.00
Furniture and fixtures	75.00
Delivery equipment	125.00
Due to the Continental Trust Co.	300.00
Due to creditors, as follows:	
H. M. Gooch	120.00
A. M. Joesting	150.00
James M. Monroe	180.00

A. M. Chapman, who is conducting a rival business, has entered into a partnership agreement with C. A. Ankromn on the above date and invests the following assets and liabilities:

Cash	$1,000.00
Notes receivable	300.00
Accounts due from customers:	
E. H. Wagner	100.00
Chas. R. Rigg	200.00
T. M. Hamlet	150.00
A. R. Manley	75.00
G. B. Crawford	125.00
M. A. McBride	85.00
Merchandise inventory	1,500.00
Delivery equipment	800.00
Furniture and fixtures	600.00
He owes notes payable	400.00
Due to creditors:	
James Gleason	75.00
G. L. Logan	125.00

Instructions:

Prepare a balance sheet, showing the net worth of Ankromn before consolidation with Chapman. Show assets and liabilities properly classified. Show accounts receivable and payable as totals.

Prepare a similar statement showing the net worth of the firm of Chapman on the above date.

Prepare a balance sheet for the partnership of Ankromn & Chapman, giving the interests of each partner in the new firm.

LABORATORY EXERCISE NO. 5

Illustration of the Balance Sheet

On December 31, 1919, the records of Ankromn & Chapman provide the following information:

Cash on hand	$3,000.00
Accounts receivable have increased	2,800.00
Merchandise inventory has increased	800.00
Delivery equipment, purchased on July 1, 1919	300.00
Furniture and fixtures, purchased on October 1	100.00
Notes received from customers during the year	1,200.00
Notes paid by customers during the year	800.00
Merchandise purchased on account	20,800.00
Paid to creditors to apply on account	18,200.00
Notes issued to bank and unpaid	1,200.00
Paid on notes due to bank	300.00
Notes issued to creditors have increased	400.00

It is estimated that the yearly depreciation on furniture and fixtures and on delivery equipment is 10 per cent.

Instructions:

Prepare a balance sheet for Ankromn & Chapman as of December 31, 1919. Profits and losses are shared by Ankromn and Chapman in proportion to their original investment.

Show accounts receivable and payable as totals and show the assets and liabilities properly classified.

LABORATORY EXERCISE NO. 6

Copy Ankromn & Chapman's balance sheet as of December 31, 1919. Write opposite each item the figure at which such item stood as at January 1, 1919, when the partnership was formed.

This constitutes one form of the "comparative" balance sheet. State briefly what value you think such a report might have.

CHAPTER IV

THE STATEMENT OF PROFIT AND LOSS

Statement of profit and loss needed to supplement balance sheet. It has been explained that the owner of property uses it in conducting a business with the expectation of making a profit. It has also been explained that the owner of property expects the accounting records to provide him information which will show him, first, whether a profit is being made and, if so, the amount thereof; second, how he can plan to use his property in the future so as to increase his profits. In order to give this information to the owner so that it can be easily understood and used, certain reports or statements are used. These reports show in summarized and classified form the information which the accounting records contain.

One form of report which is in common use was discussed in the preceding chapter. The balance sheet, a conventional form of which was there illustrated and discussed, supplies information with respect to the nature and amount of the assets and liabilities and the amount of the resulting proprietorship. Also by comparing a balance sheet at the end of a given period with the balance sheet for the same business at the end of the preceding period, the owner may ascertain readily the amount of the increase or decrease in proprietorship. Moreover, he can tell what changes in assets and liabilities have resulted in such increase or decrease. The balance sheet does not, however, furnish any appreciable amount of information with respect to the nature or volume of the business operations that have brought about these changes in the assets and liabilities, and consequently falls far short of supplying the owner with the information necessary for estimating and providing for the operations of the coming period. An illustration will make this apparent.

The balance sheet of W. A. Williams of December 31, 1918, as given in chapter iii, shows his net worth or proprietorship to be $7,630. If a year before his balance sheet showed his net worth to be $6,500, his proprietorship has increased $1,130. Consequently, if he had not

withdrawn anything during the year or made any additional investment, he would assume that he had made a profit of $1,130. Although such an ascertainment of profits by the comparison of the proprietorship at the end of the period with that at the end of the preceding period shows the proprietor the amount of the profits earned, it does not show the cause of the profit. A year later when Williams makes his balance sheet on December 31, 1919, he may find that his proprietorship has increased only $800; therefore his profits are $430 less than they were the year before. His balance sheet, however, will not show why his profits are smaller than for the year before.

It may be that his sales for the year have been smaller or that the cost of the goods purchased has been more, or it may be that more has been paid for clerk hire, heat, light, and other expenses. He of course wishes to plan his business for the next year so as to remedy, if possible, the difficulty of the past year.

It is evident, then, that some sort of supplementary report should be prepared to enable the owner to understand the nature of past operations sufficiently well to plan future operations. Such a report should show the amount of the sales for the period, the cost of the goods sold, the expenses involved in selling them, such as advertising, clerk hire, and the like, as well as all the other expenses necessary for carrying on the business, such as heat, light, insurance, depreciation on the different assets employed, expenses in delivering the goods, expenses of accounting, and any other expenses involved in the administration of the business. The same considerations hold good whether the final results of the year's operations show a profit or a loss. If it is a profit, it will enable him to plan his business so as to continue on an equally profitable basis or an even more profitable one if possible. If a loss, he will wish to discover the difficulty, and to plan the next year's operations in such a way as to obviate the reason for such a loss and to convert the loss into a profit.

A report which embodies this information is one which is usually prepared at the end of the accounting period at the same time as the balance sheet, and is known as the statement of profit and loss. This report is a very important one. Used in connection with the balance sheet, it supplies valuable information concerning the nature of the operations of the past period, and the profit or loss which has resulted

from these operations. The two reports, considered together, are very useful as an aid in planning future operations.

There are many other reports which aid in the proper conduct of the business, and these will be considered in detail later. The balance sheet and the statement of profit and loss, however, are the two which are indispensable in practically every business and which are prepared and used more commonly than any of the others.

Form of the statement of profit and loss. The statement of profit and loss, as well as the other forms of reports prepared for the use of the owner, should be put into the form which makes readily available for his use the information which he needs to have. In an earlier paragraph some of the items of information which should be contained in the statement of profit and loss were suggested, but this was done without grouping them in the most logical way. The statement of profit and loss shows four principal items: (1) the amount of the sales made for the period; (2) the cost of the goods sold; (3) the total expenses of conducting the business; (4) the resulting net profit for the period. As was suggested in the case of the balance sheet, the very simplest form of such a statement would be one which shows these items as totals only.

If W. A. Williams has made sales amounting to $24,000 during the year, and the cost of the goods sold is $17,000, and the expenses incurred in conducting the business are $6,000, with a resulting net profit of $1,000, the statement of profit and loss might be made in the following form:

Sales for the year . . .	$24,000.00		
Cost of goods sold . . .	17.000.00		
Gross profit		$7,000.00	
Expenses		6,000.00	
Net profit			$1,000.00

Such a statement would be of some value to Williams if studied by itself and would be of even more value if compared with previous statements. By such a comparison he could see not only the increase or decrease in the net profit, but also whether his sales have increased or decreased and whether the cost of goods sold and the expenses of conducting a business have increased faster than sales. If profits

have increased or decreased, this may be the result of any one of several combinations of circumstances. Take for illustration an increase of profits over a preceding year. This may result from: (1) an increase in the volume of sales with the ratios among the four items listed remaining substantially the same; (2) a lower cost of goods sold without any increase in sales or any appreciable increase in the expenses of the business; (3) an increase in sales with a larger proportionate increase in the cost of goods sold, expenses, or both, still resulting in an increased profit; (4) a decrease in the sales with more than a proportionate decrease in cost of goods, expenses, or both.

These are merely suggestions of some of the different combinations that might appear. A decrease in the net profits might result from an equally large number of changes in the relationships of these four principal items. A knowledge of these facts, as the student will readily understand, must be of considerable assistance to the owner in planning his business by indicating to him which of these four main groups should receive especial attention in an effort to modify the relations among them so as to result in a larger net profit. Thus the manager may decide that the expenses are too large and that he should make an effort either to reduce them or to increase the volume of sales without increasing expenses appreciably. But at this point a difficulty arises. If there is available no more information than is furnished by this brief summary, how can an owner determine what is the best way to go about changing this ratio? How is he to know that a decrease in expenses is possible without seriously crippling the efficiency of the business operations? How is he to estimate whether an increase of sales under the conditions prevailing is not likely to cause even a greater proportional increase in expenses? And if expenses are to be reduced, where should that reduction fall? Shall it be in the expense of advertising, in the number or rate of remumeration of the sales force, in expenses of delivery, or in the office expenses? The information made available by so simple a statement is not adequate for the solution of such problems as these.

It is plain that there must be a somewhat fuller analysis of the main groups of the statement of profit and loss. For each of these groups such analysis must be shown as will give the owner a basis for intelligent planning. The four groups shown above may be considered one by one to determine what analysis of each is desirable.

Sales. It may be assumed that in a small business such as is conducted by Mr. Williams the total sales may be considered as one item. In many businesses it is desirable to provide an analysis of sales in the accounts and on the reports. In later chapters some of the analyses which may be of value will be considered. For the present, however, it will be assumed for the sake of simplicity that an analysis of sales is not necessary. Accordingly the sales of Mr. Williams will be shown on the statement of profit and loss as a total of $24,000.

Cost of goods sold. The cost of goods sold is obtained by a combination of at least three items, and it is customary to show these separately on the profit and loss statement. Assuming that Mr. Williams is conducting a mercantile business, and not manufacturing any of the goods he sells, if he had $2,500 of merchandise on hand at the beginning of the year and purchased $18,000 of merchandise during the year he should have $20,500 of merchandise on hand on December 31 if none had been sold. But he has been selling throughout the year, and on December 31, by actual count, he finds that he has $3,500 of merchandise on hand. He assumes that the goods not on hand must have been sold; and consequently by substracting $3,500, the amount of goods on hand December 31, from $20,500, the amount of goods on hand January 1 plus the purchases made during the year, he obtains a difference of $17,000, which represents the cost of the goods sold during the year.

As previously stated, the goods in which a mercantile business deals are known as merchandise and the amount on hand at any particular time is known as the merchandise inventory. In view of the foregoing, it may be understood quite easily why the cost of goods sold is shown on the statement of profit and loss as follows:

Cost of Goods Sold

Merchandise inventory, January 1, 1918	$ 2,500.00		
Purchases	18,000.00		
		$20,500.00	
Merchandise inventory, December 31, 1918		3,500.00	
Net cost of goods sold			$17,000.00

Gross profit on sales. When the cost of goods sold is subtracted from sales, the difference represents the profit which would be made if no expenses were incurred in conducting the business. Expenses are always incurred, however, in the sale of goods; therefore, it is necessary to consider them in determining the profit made. Consequently the difference between the amount received from sales and the cost of goods sold is termed "gross profit on sales." It is termed "gross" profit because the expenses must be subtracted in order to obtain the final or "net" profit.

W. A. Williams has made sales to the amount of $24,000 and the cost of goods sold is $17,000, so the gross profit on sales is $7,000. It appears on the statement of profit and loss as shown in the illustration of this statement at the end of the chapter.

Classification of expenses. On page 41 the expenses of W. A. Williams are shown as one item of $6,000. Although all the expenses of a business may be shown as one total, it is desirable that expenses be classified. The nature and amount of the operating expenses are determined by the size, nature, and organization of the business. In a mercantile business, since the principal operations are in connection with the purchase and sale of merchandise, it will be apparent that the expenses incurred in connection with buying, usually known as "buying expenses," and those incurred in connection with sales, known as "selling expenses," are two principal items. In addition to these, certain expenses known as "administrative expenses" are incurred in the general administration of the business. In a retail business where goods are delivered to the customers there is another item of expense known as "delivery expense." This item also occurs in connection with a wholesale business, since it is necessary to deliver to the railroad station the goods sold. In connection with a wholesale business it is sometimes called "drayage" instead of delivery expense. In a business where large stocks are carried and as a consequence a large warehouse maintained, the item of "warehouse expense" will be found. In a manufacturing business certain expenses known as "manufacturing expenses" will be incurred in connection with the manufacturing operations. In other lines of business where other operations are performed other items of operating expense will occur. In the present discussion of the statement of profit and loss only the first four items mentioned, that is, buying, selling, delivery, and

administrative expenses, will be considered. In later chapters other kinds of expense will be considered.

The expenses incurred in connection with any one of these operations of the business—buying, selling, delivering, and administering—may be shown under several heads so as to indicate its particular nature. For the sake of brevity and simplicity it will be assumed for the present that all the expense in reference to each operation is recorded in one account and shown as one item on the statement of profit and loss. If kept in separate accounts these would be shown on the statement under the main headings suggested above. For instance, the selling expenses might be shown as follows:

Selling Expenses

Salaries and wages of sales force . .	$900.00	
Advertising	500.00	
Miscellaneous	40.00	
Total selling expense		$1,440.00

If only the four accounts mentioned above are kept with operating expenses, they will be shown on the statement of profit and loss as follows:

Buying expenses	$ 444.00	
Selling expenses	1,440.00	
Delivery expenses	750.00	
Administrative expenses	3,366.00	
Total operating expenses		$6,000.00

In a subsequent chapter the particular items which may constitute the buying, selling, delivery, and administrative expenses will be indicated in connection with the construction and interpretation of the accounts kept with these expenses.

Operating and non-operating expenses. In the conduct of a business the owner incurs certain expenses which are the result of the regular operations of the business. These are known as "operating expenses." All those already mentioned under the headings of selling, buying, delivery, and administrative expenses are of this type. In addition, the owner may incur certain other expenses which are not connected directly with the primary operations of the business and which are known as non-operating expenses. For example, W. A. Williams

may purchase a garage which he retains for a time and sells for a profit. The profit arising from this transaction does not arise from the regular operations of the business, since it is not the function of a retail merchandise store to deal in garages. Consequently this profit is termed "non-operating income." It is probable that some expenses will be incurred in connection with the garage before it is sold. These expenses, if they are not incurred in connection with the regular operations of the business, will be termed "non-operating expenses."

It is quite usual to find in connection with a business enterprise certain income and also certain expenses which fall outside the line of operations for which the business is organized. It is, therefore, the practice on the statement of profit and loss to distinguish between operating and non-operating income and expenses.

For the present such non-operating expenses can be disregarded for they would not be of frequent occurrence in the case of a small business like that of W. A. Williams. Later they will be discussed and the method of showing them on the statement of profit and loss will be illustrated. The purpose of mentioning them here is to point out to the student that such expenses are not included in the operating expenses of a business and to explain that the operating expenses of a business are usually indicated as such on the statement of profit and loss as follows:

Operating Expenses

Buying expenses	$ 444.00	
Selling expenses	1,440.00	
Delivery expenses	750.00	
Administrative expenses	3,366.00	
Total operating expenses		$6,000.00

Heading or title of the statement of profit and loss. A discussion of the form of the statement of profit and loss would not be complete without some mention of the form of heading. This statement is drawn up to show certain facts with regard to a particular business. It follows that, as in the case of the balance sheet, it is essential that the name of the business should appear prominently in the heading. The balance sheet represents the condition of the business enterprise as at a given date and consequently it gives the name of the company and the date. The statement of profit and loss, however, does not give

the condition of the business upon a given date, but gives a summary of the operations of the business for a given period, which may be of any duration, say, a year, or a month. In the heading of the statement of profit and loss, therefore, there will be shown the length of the period covered, whether a month, three months, six months, or a year; and the date at which the period ends. On the statement of profit and loss for Mr. Williams the heading will appear as follows:

W. A. WILLIAMS

STATEMENT OF PROFIT AND LOSS FOR YEAR ENDING DECEMBER 31, 1918

Illustration of the conventional form of the statement of profit and loss. Having now discussed the main points to be considered in preparing the profit and loss statement, and having undertaken some analysis of the main groups into which such a report would be divided, as well as the proper form of heading, it is possible to assemble these groups into a form which will illustrate in a simple way the essentials of the statement. Using the items and the amounts previously assumed, the report will appear:

W. A. WILLIAMS

STATEMENT OF PROFIT AND LOSS FOR YEAR ENDING DECEMBER 31, 1918

Sales			$24,000.00
Cost of goods sold:			
Merchandise inventory, January 1, 1918	$ 2,500.00		
Purchases	18,000.00	$20,500.00	
Merchandise inventory, December 31, 1918		3,500.00	
Cost of goods sold			17,000.00
Gross profit on sales			$7,000.00
Operating expenses:			
Buying expense	$ 444.00		
Selling expense	1,440.00		
Delivery expense	750.00		
Administrative expense	3,366.00		
Total operating expenses		$6,000.00	
Net profit			$1,000.00

This form of the statement of profit and loss resembles closely the first form of balance sheet shown on page 33, and, like it, is known as the "report" form. The statement of profit and loss is also sometimes drawn in the "account" form, but this form is now almost entirely obsolete in general practice. It hardly seems worth while to illustrate it here.[1] Illustrations may be found in some of the older texts if the student wishes to see how such a statement might be shown in the account form. The form shown above is the logical one and is the one generally employed by accountants. The student should familiarize himself with it and be sure that he has a grasp of the principles underlying its organization.

Balance sheet and statement of profit and loss taken as types of reports. It has been repeatedly emphasized that the purpose of accounting is to provide reports which will be of aid to the management in the conduct of the business. Two examples of such reports have been shown and some reasons for their preparation presented. The balance sheet and the profit and loss statement have been selected as typical of reports in general because they are the two forms which are at present in practically universal use. Employed in conjunction with each other, these two reports supply much valuable information. When complete and carefully prepared they present information that is significant not only to the owner but also to the creditors, both long-time and short-time, and to governmental agencies for taxation and regulation, as well. However, they fall far short of supplying all the analysis needed in the internal management of the business. There are a number of other forms of reports which are desirable, and which are actually being used by the more progressive business organizations.

It is scarcely worth while to present any of the more complicated forms for the consideration of the student at this point. It is quite enough for the present if he can be made to understand the principles involved in the preparation of the reports needed by a very simple form of business organization. A clear understanding of the construction, interpretation, and use of the accounting records necessary to serve the reporting requirements of such a business is a considerable attainment for the beginning student. When he has once mastered

[1] See Klein, J. J., *Elements of Accounting*, p. 172, for an illustration of the profit and loss statement in account form.

the fundamentals of accounting, with simple applications, it should not be difficult to extend the application of these principles to more complicated business organizations, with more extensive reporting requirements.

QUESTIONS FOR CLASS DISCUSSION

1. Mr. Jones has three stores located in Chicago. He has a manager for each store. What information must he have in order to determine the comparative efficiency of these managers? How would he obtain this information?
2. What are the principal items of information shown on the statement of profit and loss?
3. What would be the first item shown on the statement of profit and loss of the following businesses: (*a*) grocery store; (*b*) bank; (*c*) firm of lawyers; (*d*) commission house; (*e*) railroad; (*f*) department store; (*g*) shoe factory.
4. G. E. Frazer had merchandise on hand on March 1 to the value of $4,000.00. During the month he purchased $8,000.00 of merchandise and sold $10,000.00. On March 31 his inventory was valued at $4,200.00. His expenses for the month had been $1,000.00. What was his net profit for the month?
5. At the end of the next month the statement of profit and loss of Frazer shows that he has made a profit of only $600.00. He is puzzled as to the cause of the decrease and asks your advice. In looking over his records you find that $800.00 lost in trading on the Stock Exchange has been added to his expenses for the month. What report would you make to him?
6. Explain and illustrate the difference between "gross" and "net" profit.
7. On the statement of profit and loss of the X Retail Store the operating expenses are listed as follows:

OPERATING EXPENSES

Salaries	——
Rent	——
Light	——
Heat	——
Taxes	——
Depreciation	——
Repairs	——
Supplies	——
Traveling expenses	——
Insurance	——

Is this a satisfactory classification of expense? Why?

8. On December 31, 1919, the statement of profit and loss of W. T. Hupe in summary form is as follows:

Sales for the year	$36,000.00
Cost of goods sold	20,000.00
Gross profit on sales	$16,000.00
Operating expenses	12,000.00
Net operating profit	$ 4,000.00

One year later the statement of profit and loss of Hupe is as follows:

Sales for the year	$72,000.00
Cost of goods sold	44,000.00
Gross profit on sales	$28,000.00
Operating expenses	27,000.00
Net operating profit	$ 1,000.00

Mr. Hupe is surprised to find that though his sales have doubled, his profits have decreased. He asks you for an explanation. What explanation would you give him?

9. Give some of the probable reasons for the unfavorable results obtained by Mr. Hupe during the year 1920.
10. Explain and illustrate the difference between operating and non-operating expenses; operating and non-operating income.
11. Explain and illustrate the difference between an "expense" and an "expenditure."

REFERENCES FOR FURTHER STUDY

Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chaps. vi and vii.
Mitchell, T. W., *Accounting Principles*, chap. ii.

LABORATORY EXERCISE NO. 7

Illustration of Statement of Profit and Loss

The records of Howard Reed, retail merchant, show that his operations for the year 1918 were as follows:

Merchandise inventory January 1	$ 9,000.00
Merchandise purchases	23,000.00
Merchandise sales	30,000.00
Merchandise inventory December 31	12,000.00
Salaries of sales clerk	2,000.00
Depreciation on furniture and fixtures	80.00

Depreciation on delivery equipment	$ 75.00
Salary of delivery driver	800.00
Insurance on stock	60.00
Insurance on delivery equipment	20.00
Advertising	90.00
Salary of Howard Reed	2,000.00
Traveling expenses of Howard Reed on buying trips	120.00
Taxes	70.00
Postage and stationery	30.00
Wrapping paper and twine	40.00
Miscellaneous office supplies	20.00

Instructions:

Prepare a statement of profit and loss for the business of Howard Reed for the year 1918.

LABORATORY EXERCISE NO. 8

Illustration of the Statement of Profit and Loss

The inventory of merchandise of the A. B. Company on January 1, 1919, is $3,500.00. During the month of January they purchase $14,989.00 of merchandise and sell $19.500.00. On January 31 their inventory is $3,700.00. During the month their expenses are as follows:

Sales salaries	$500.00
Advertising	150.00
Salary of delivery driver	80.00
Repairs to delivery truck	10.00
Heat and light	100.00
Telephone and telegraph	20.00
Buying expenses	75.00
Office salaries	200.00
Office supplies	80.00
Insurance on building	16.00
Insurance on delivery truck	2.50
Insurance on stock	8.40
Depreciation on building	14.00
Depreciation on delivery truck	3.00
Depreciation on furniture and fixtures	2.00

Instructions:

Prepare a statement of profit and loss for the A. B. Company for the month of January.

LABORATORY EXERCISE NO. 9

Illustration of Statement of Profit and Loss

Lewis E. Alward commences the retail grocery business on June 1, investing the following assets:

Cash	$3,000.00
Building	3,000.00
Lot	1,000.00

During the month he purchases merchandise on credit as follows:

On open account	$4,500.00
For notes	1,000.00

He sells merchandise:

On account	$4,000.00
For notes	500.00

His cash receipts for the month are as follows:

Cash sales	$3,000.00
Collected from customers on accounts	2,500.00

His cash disbursements during the month are as follows:

Cash purchases of merchandise	$3,000.00
Furniture and fixtures	200.00
Clerk hire (administrative)	150.00
Clerk hire in selling department	300.00
Heat and light	100.00
Telephone and telegraph	8.00
Advertising	90.00
Incidentals	40.00
Stationery	10.00
Janitor service	25.00
Buying expenses	80.00
Paid trade creditors on account	1,400.00
Paid on notes payable	600.00

Depreciation for month:

On building	$30.00
On furniture and fixtures	5.00

Inventory of merchandise on hand June 30, $3,000.00.

Instructions:

Make a statement of profit and loss showing Alward's net profit for the month of June.

Make a balance sheet showing Alward's financial condition on June 30.

CHAPTER V

THE ACCOUNT AS A MEANS OF CLASSIFYING INFORMATION

A means of classifying business data needed. It should have become quite clear that the most important function of the accountant is that of preparing such reports as will be of aid to the owner or manager of the business in planning or conducting the operations of the business. The balance sheet and the statement of profit and loss are two reports which are required in practically every case. These two reports may be considered as typical of all the accounting reports, since in these two are reflected all the elements of the business. These reports are prepared at least once a year and in many cases much more frequently.

It is apparent from the illustrations of these statements given in the two preceding chapters that even in a very simple form of business they should contain a number of items of information. It should also be realized quite readily that during the fiscal period there are a great number of transactions taking place which change the amounts of these items day by day. It is thus apparent that there must be some means employed for classifying the data with regard to all the transactions and changes taking place in the business, in such a manner that the information desired on the reports may be made available at the end of the fiscal period.

For instance, in order that W. A. Williams may be able to make a balance sheet he must know the amount of the various items which appear thereon. In the case of some items, such as cash and notes receivable, he could obtain the amount by actual count. He would have no means of knowing, however, whether the cash on hand was actually correct unless he knew the total cash received during the period and the total cash paid out so he could check the amount of the balance on hand against the amount obtained by actual count. In the same way he must know the total amount of the notes received during the period and the total paid so he can know the balance on

hand. In the case of the other items, such as accounts receivable, their amount cannot be obtained by count because they are not represented by anything tangible. Hence the only possible means of knowing the amount due from customers is to have a record of the amount of the promises received from customers and the promises they have paid or redeemed so as to obtain the difference, which represents the accounts receivable unpaid. Again, it would not be possible to know the amount of the notes payable or accounts payable owed by the business unless a record is kept of the written and oral promises issued and redeemed.

In the case of the statement of profit and loss, an even more apparent need of collecting such information is seen. It is not hard to see that it is entirely out of the question for W. A. Williams to know at the end of the period the exact amount of the sales or his expenses unless a written record of these classes of information is maintained throughout the period. In short, information sufficiently comprehensive and exact for the preparation of the balance sheet and statement of profit and loss and classified according to the reporting requirements which have been indicated can be made available only through the use of continuous written records. It is the purpose of the present chapter to explain the form of record ordinarily employed by the accountant for recording and classifying the information necessary for the preparation of the accounting reports.

The account a means of classification. Since it is desirable to keep a separate record of each item, such as cash, accounts receivable, accounts payable, sales, and selling expense, which is to appear on the balance sheet or statement of profit and loss, it would seem the logical thing to set apart on the records a space for each such item considered necessary for these reports and to record in that space under a proper heading all the changes which take place in connection with the item. This record would be kept in such a manner as to make it possible to reconstruct the history of that item if so desired and to secure at any time the information regarding it which may be required for reporting purposes. Such a record is known in accounting as "the account." In terms of this discussion the account may be defined as a systematic record of the changes taking place in an item which appears in accounting reports kept under the title of the item in question. With the aim of giving this definition content, the re-

mainder of this chapter will be devoted to a discussion of the nature of the information which is recorded in the account and the form in which this information is entered. A discussion of the character and construction and interpretation of the accounts with the individual items will be deferred to a later chapter.

As suggested in the preceding paragraph, an account is kept with each item of information which is needed in making an accounting report such as the balance sheet and statement of profit and loss. Consequently accounts are kept with assets such as cash, notes receivable, accounts receivable, office furniture, and delivery equipment; with liabilities such as notes payable and accounts payable; with expenses such as cost of selling and administration; and with the sources of income such as sales. In later chapters it will be shown that when more detailed information is desired on the balance sheet and the statement of profit and loss, it is necessary to have additional accounts so as to obtain this information. For the present it is not necessary to consider accounts other than those necessary to provide the information which appears on such simple statements as the balance sheet and the statement of profit and loss of Williams, as given in the two preceding chapters.

In some cases there are special reports of a statistical nature which are prepared for some of the subsidiary managers and which contain information which is not set forth in the regular accounts but is obtained from some form of supplementary records. The form and nature of such reports and the method of obtaining the information which they contain will be considered in subsequent chapters. For the present, however, the discussion will be confined to the means of obtaining the information which appears on the balance sheet and the statement of profit and loss, and this is obtained from the formal accounting record known as "the account."

As indicated by the preceding definition, the title under which the account will be kept is the name of the item to be shown in the report. If the reports are to be of the greatest value to the parties to whom they are submitted, these titles must be carefully chosen. The information grouped under a single title must so far as possible bear upon a single item to be shown on one of the reports and the title must leave no doubt in the mind of the reader with respect to the nature of that item. Thus in reporting the assets of the firm,

the title "U.S. Bonds and Other Securities" is clearly one that might be misleading as to the true condition of the firm. It not only fails to show the amount of the bonds in relation to the amount of the other securities, but gives the reader no idea of the nature of the others. There is no way to judge whether they are conservative investment securities or of the most highly speculative types. The account title of "Miscellaneous Expense" is one which often results in concealing useful information in regard to the expenses of the business. In choosing titles for the accounts employed, the accountant should always strive to make use of titles which are clear, descriptive, and unambiguous.

The form of the account. In making the accounting record, facts of opposite tendencies must often be recorded in the same account. For instance, in the account with cash it is necessary to record cash received and also cash paid out, so as to be able to offset the two and obtain the cash on hand. The same is true with reference to accounts receivable where it is necessary to record both the oral promises received and the oral promises paid in order to determine the difference or the accounts receivable unpaid. Since sooner or later it may be necessary to record facts of opposite tendencies in all accounts, it is expedient to divide the account into two sections so as to facilitate the recording of such facts. These two sections, which for the present may be called the right section and the left section, may be constructed as shown in the following illustration:

CASH

1	2	3	4	5		1	2	3	4	5	
1919						1919					
June	1	Balance	—	2,456	75	June	30	Accounts payable	—	1,500	00
	30	Cash sales	—	2,250	00		30	Notes payable	—	1,500	00
	30	Accounts receiv-					30	Salaries—sales	—	200	00
		able	—	1,400	00		30	Office salaries	—	150	00
	30	Notes receivable	—	800	00		30	Delivery expense	—	224	50
							30	Advertising	—	145	00
							30	Balance	—	3,187	25
				6,906	75					6,906	75
July	1	Balance	—	3,187	25						

It will be seen from this illustration that the columns employed are the same on each side of the page. On each of the two sides

provision is made for the tabulation of information with regard to the item of cash. The facts which may thus be recorded with reference to each change taking place in this item are:

a) The *date*. Columns 1 and 2 are used for this purpose, the month and the day of the month, respectively, being entered in these two columns. The month, having once been entered, need not be entered again until the month changes or the account is transferred to a new page. It is customary to indicate the year by writing it at the top of column 1 on each side of a new page.

b) Any *explanation* of the cause or nature of the entry which may seem desirable is entered in column 3. It will appear from later discussion (see chaps. xi and xii) that it is not often necessary to enter any such explanation in the account, and in the majority of entries this space will be left blank.

c) The business transaction or change which affects the account is recorded in its entirety on another form of record before being transferred to the accounts involved. Column 4, known as the *folio* column, is used to show the reference to the page of the record from which the information has been transferred. By referring to this page, a complete explanation of the transaction is available. This is one reason for the relatively infrequent use of the column 3.

d) The *amount* involved in each entry to the account is written in column 5, which is divided into two parts, a wider column for the dollars and a narrow one for the cents.

The balance of the account. The object of each account, as has been stated, is to give certain definite information with regard to a particular item, for purposes of the accounting reports. For this purpose it should be possible to reach a conclusion with regard to the item in question. It is shown by the foregoing illustration how facts of opposite tendencies with regard to an item are recorded in the accounts. The amount of cash on hand on June 1 was shown on the left-hand side of the account, and all additions to cash were recorded beneath it on the same side, while on the right-hand side all subtractions from the amount of cash were recorded. It is evident, then, that the difference between the total of the right-hand side and that of the left-hand side should represent the amount of cash on hand at the end of the period. The method by which this conclusion is shown on the account itself is indicated in the illustration. The amount of the difference between

the totals of the two sides is written on the right-hand side, and the two sides are then totaled, the totals being entered opposite one another on the two sides of the page and double lines drawn under them to indicate an equality to that point. The amount of the excess of the left-hand side over the right is then written below the double line on the left-hand side. This figure represents the amount of cash that should be on hand at that time, and is known as the "balance" of the account. If the entries in a given account are made correctly, by writing all additions to the item involved on one side of the page and all subtractions on the opposite side, such a balance may always be obtained by comparing the totals of the two sides, whether the formal balancing of the account is performed or not.

It may happen that the two sides of the account are equal. In this case the account is said to be "in balance," and there is no need for adding anything to either side to bring about an equality, nor is there any balance to be written below the double lines on the side showing an excess, since no excess exists. Where this is true, the item involved will not appear in the reports for the period.

Interpretation of the account balance. The necessity of care in selecting titles for the individual accounts was probably sufficiently emphasized in the preceding discussion of the heading or title of the account. If proper care has been exercised in this matter, there should be no difficulty in deciding upon the place of the item in the accounting reports. If the titles of all the items which appear in the reports are descriptive and unambiguous so that the student understands the nature of each item from the title, he should have no difficulty in the interpretation of the balance of the accounts with those items bearing the same titles. The nature of the balance of each account is revealed by the classification which is given that item on the balance sheet, statement of profit and loss, or other formal report. Thus if the item of furniture and fixtures is classified on the balance sheet as a fixed asset, it is clear that the balance of the account with furniture and fixtures represents the amount of the fixed asset. When accounts receivable are shown as a current asset on the balance sheet, the meaning of the balance of that account is equally plain. The same thing applies to the other items on the reports, such as notes payable under current liabilities, sales as an item of income, and sales salaries as an item of operating expense.

In the definition of the account it is stated that it is a *systematic record of information.* This statement implies that a uniform procedure is followed in the construction of the account. The chief factor in this uniform procedure is the manner in which the amount of any change in the item represented by a particular account is recorded in that account. The illustration already given of the account with Cash indicates that additions to an asset are recorded on the left-hand side of the asset account affected, and that subtractions are entered on the opposite, or right-hand, side of the account. Accounts with kinds of expenses resemble asset accounts in the fact that they represent values received by the business, though the values entered as expense are those which have been used up in securing income. Like additions to assets, additions to expense are recorded on the left-hand side of the appropriate expense accounts. Any deduction from an expense is recorded on the right-hand side of the expense account.

In the case of liability accounts, which are opposite in their nature to asset accounts, the additions to the liability in question are shown on the right-hand side, and the subtractions on the left-hand side. Income accounts represent items of a nature opposite to that of expense. Additions to income are therefore entered on the right-hand side of the income accounts involved, and subtractions from such income are entered on the left-hand side of the income account.

It has been explained that proprietorship is the excess of the total assets of the business over its total liabilities. Since the total of the assets is equal to the sum of all the liabilities and the proprietorship, it is a part of the uniform procedure to enter additions to proprietorship on the right-hand side of the proprietorship account affected and deductions on the left-hand side. Thus the credit balances of the liability and proprietorship accounts are set over against the debit balances of the asset accounts, while the credit balances of the income accounts are set over against the debit balances in the accounts which show the expenses incurred in securing that income.

Consequently the balance of an account which is larger on the left side represents either an asset or an expense, while the balance of the account which is larger on the right side represents either a liability, a source of income, or proprietorship. As previously stated, if the student is familiar with the items which appear on the accounting

reports he will have no difficulty in interpreting the balance of the accounts kept with these items.

The ledger and its contents. The accounts of the business are arranged in systematic order in a book called the *ledger*. The ledger is usually a bound book, the pages of which are ruled as shown on page 62. It is sometimes defined as the book of accounts. In it is collected in summarized form, under proper account titles, the information necessary to make the accounting reports. There should be an account kept with each item of information which the owners desire to appear on the reports.

The number of accounts kept will vary with the size of the business, the number and types of assets and liabilities involved, the complexity of its operations, and more especially with the manner in which the business is organized, since the number and complexity of the reports needed to exercise control in the business vary with all of these factors. It is true that it is a waste of energy to maintain accounts which are not used in preparing the reports. It is equally true that care must be exercised that an analysis of the facts regarding the business and its operations is kept in sufficient detail to make available all information needed for the reports. It is easier to combine information where too many accounts have been maintained than to reconstruct an analysis where several items which should have been kept separate have been included under one account. The principles governing the arrangement and use of the ledger will be developed in the next few chapters through discussion and illustrative exercises involving comparatively simple accounts, and these principles will be applied later to business problems of greater complexity.

The use of the terms debit and credit in relation to the account. It has been explained in the preceding paragraphs that the account is divided into two sides and that additions to the item with which the account is kept are shown on one side and subtractions on the other side. It has also been stated that it is the practice of accountants to use the left-hand side for recording additions to assets and expenses and the right-hand side for recording additions to liabilities, income, and proprietorship. Among accountants and others familiar with accounting, the terms "left-hand" and "right-hand" are not employed, but the two sides of the account are known respectively as the "debit" and "credit" sides.

Following out this terminology, the entering of any item of information on the left-hand side of the account is referred to as "debiting" the account, and entering such an item on the right-hand side as "crediting" the account. When an item is entered on the left-hand side of the account it is called a "debit" to that account, and when on the right-hand side, a "credit." Similarly an account in which the total of the left side exceeds the total of the right is said to have a "debit balance," while one in which an excess occurs on the right side of the account is said to have a "credit balance." If the student will familiarize himself with the use of these terms as used in relation to the account, he should not experience any difficulty either in applying them or in understanding them as employed in the literature of accounting.

Considerable space is devoted by some writers to the discussion of the original significance of the terms debit and credit and to the historical development of their use. A comparison of the various methods of approach that have been employed in attempting to introduce the student to their use would afford an interesting study, if not a particularly useful one. Such discussion, however, has little bearing on the functions of accounting and will not be introduced here, lest it confuse the student. For the purposes of this text, if the student understands the way in which the terms are employed as outlined above, he has all the information concerning them which will prove of any marked value to him.

Accounts affected by business transactions. In order to maintain or increase the amount of the net investment of the business, the operations for which the business is organized must be carried on more or less continuously. This means that the various items with which accounts are kept, the assets, liabilities, sources of income, and kinds of expense will be continually changing in their amounts. Such changes are the result of business transactions. Since it is the function of the accountant to report the results of the business operations, it is desirable that the relation of the business transactions to the accounts be considered.

A business transaction may be defined as an exchange of values. As a result of such exchanges certain values are received by the business and certain values are surrendered by the business. If Williams sells groceries to a customer for cash, a value in the form of cash is received and a value in the form of merchandise is surrendered.

When he purchases merchandise on account, giving his oral promise to pay, a value is received in the form of merchandise, while an equal amount of value is surrendered through the assumption of an additional liability by the business. If Williams pays a certain amount for clerk hire, the value he receives is the services rendered by the clerk, while the value parted with is the amount paid to the clerk. So in the case of every transaction there is an exchange of values and it is the function of accounting to record these values, both those received and those parted with.

In accounting, the values received are called "debits" and recorded on the debit side of the account to which they pertain, and the values given up are called "credits" and recorded on the credit side of the account to which they pertain. It can be seen, therefore, that every transaction affects at least two accounts, involving a debit to one and a credit to the other. An illustration of the two will make this more apparent. If $800 of merchandise is sold for cash during the month of January, the value received is $800 of cash. Therefore the cash account will be debited as follows:

CASH

1919 January	Merchandise	800	00	1919			

The value parted with is the merchandise. When merchandise is sold it is termed a sale, so the sales account will be credited as follows:

SALES

1919				1919 January	Cash	800	00

If during the same month $400 of merchandise is purchased for cash, the effect on the business is just the reverse. The value received is the merchandise. When merchandise is purchased it is termed "purchases"; so the purchases account will be debited as follows:

PURCHASES

1919 January	Cash	400	00				

The value parted with is the cash, which will be credited to the cash account. This account will then appear as follows:

CASH

1919 January	Merchandise	800	00	1919 January	Purchases	400	00

If Williams pays $100 for a sales clerk during the month, the value received is the services of the clerk, which will be recorded as a selling expense. The selling expense account will therefore appear as follows:

SELLING EXPENSE

1919 January	Cash	100	00				

The value parted with is the cash which will be credited to the cash account and this account will then appear as follows:

CASH

1919 January	Merchandise	800	00	1919 January	Purchases	400	00
					Selling expense	100	00

Determination of debits and credits to accounts. Many attempts have been made to give fixed rules for the debiting and crediting of accounts. As suggested previously, the determination of the debits and credits resulting from a transaction necessitates that the transaction be analyzed and the value or values received by the business and the value or values parted with by the business be ascertained, after which the former are debited to the account to which they pertain and the latter credited in the same manner. If it is desired to express this as a formula, it might be stated as follows: Debit the appropriate account for all values received and credit the appropriate account for all values parted with. The application and illustration of this statement with reference to particular accounts will be given in the chapters immediately following.

Equality of debits and credits to the accounts. The business transaction has been defined as an exchange of values, and it has been shown that in recording such an exchange there will necessarily be an

equality between the debits and the credits recorded. Thus all debits to accounts showing receipts of value will be accompanied by equal credits to accounts showing surrender of value. And all credits to accounts showing surrenders of value will be accompanied by equal debits to accounts showing the receipts of value. It follows from this that there must be at all times an equality between the total debits made to the accounts and the total credits. One manner in which the student should test the correctness of his analysis of any transaction or other change to be recorded is to make sure that the total of the debits to be recorded, according to his analysis, is equal to the total credits to be recorded. Some of the uses that are made of the existence of this equality between debits and credits, and some of the means of testing it, will be discussed later in this course.

QUESTIONS FOR CLASS DISCUSSION

1. You have purchased the business of H. M. James, retail merchant, with the agreement that you are to acquire his assets, assume his liabilities, and pay him the amount of his net worth as shown by his balance sheet. He presents a balance sheet which shows accounts receivable to the amount of $12,000.00. What additional information would you request with reference to this item? How would you verify the information which he provides?
2. You are requested to instal an accounting system for Brown & King, wholesale merchants. What information would you desire before deciding upon the accounts which should be maintained on their ledger?
3. Explain the construction of an account.
4. The cash on hand on January 1 is $1,400.00. How would this be shown in the cash account?
5. During the month $4,000.00 of cash is received and $4,200.00 of cash is paid out. How would this be shown in the cash account?
6. How would the cash on hand on February 1 be determined?
7. How are addition and subtraction indicated in the account?
8. Explain and illustrate the meaning of the terms "debit" and "credit."
9. Explain and illustrate how transactions are recorded in accounts.
10. The following list of account balances is taken from the ledger of A. B. Johnson:

Selling Expenses	$ 400.00
Delivery Equipment	600.00
Land	2,000.00
Buying Expenses	100.00

Sales	$12,000.00
Merchandise Inventory	3,000.00
Purchases	10,000.00
Accounts Payable	4,000.00
Notes Receivable	200.00
Notes Payable	1,200.00
Cash	800.00
Delivery Expenses	340.00
Administrative Expenses	1,420.00
Building	2,000.00
Accounts Receivable	3,800.00
A. B. Johnson, Proprietor	2,600.00

State which of these represent debit and which credit balances.

11. If transactions are recorded properly in the accounts, what relation exists between the debits and credits shown by the accounts?
12. Name the debits and credits resulting from the following transactions:
   a) Purchase merchandise for cash, $200.00.
   b) Purchase merchandise from R. L. James on account, $300.00.
   c) Sell merchandise to C. R. Laws on account, $18.00.
   d) Pay $40.00 for services of stenographer.
   e) Pay A. B. Hill $20.00 to apply on account.
   f) Receive $40.00 from J. T. Hensley to apply on account.
   g) Pay $80.00 for rent of store.
   h) Sell for cash merchandise, $75.00.
   i) Pay for services of sale clerk, $50.00.
   j) Receive from A. P. James $40.00 to apply on account.

REFERENCES FOR FURTHER STUDY

SPRAGUE, CHAS. E., *The Philosophy of Accounts*, chaps. i–iv.
KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chaps. x and xi.
PATON, W. A., AND STEVENSON, R. A., *Principles of Accounting*, chaps. ii and iii.
MITCHELL, T. W., *Accounting Principles*, chap. iv.

LABORATORY EXERCISE NO. 10

ILLUSTRATION OF THE ACCOUNT

The following transactions were performed by J. B. Adams, retail merchant, during the month of June:

1. Purchased of J. H. Bishop & Co. on account, merchandise, $246.00.
2. Paid rent for the month, $60.00.
3. Purchased of L. S. Lyon & Co. on account, merchandise, $340.00.

4. Sold to A. B. Hill for cash, merchandise, $46.00.
5. Sold to H. M. Peabody on account, merchandise, $27.00.
7. Paid stenographer one week's salary, $25.00.
8. Purchased of Marshall Field & Co. on account, merchandise, $250.00.
9. Purchased of the Acme Furniture Co. for cash, desk and chair for office use, $100.00.
10. Received from A. K. Long to apply on account, $23.00.
11. Paid James Langley & Co. on account, $82.00.
12. Received a thirty-day note for $27.00 from A. B. James to apply on account.
14. Paid sales clerk for two weeks' services, $40.00.
14. Paid $10.00 for repairs on delivery equipment.
15. Paid $12.00 for repairs on building.
17. Received $20.00 from Alfred Long to apply on account.
19. Sold M. M. McGee on account, merchandise, $16.80.
20. Paid for services of delivery driver, $60.00.
21. Paid for expenses of buying trip of Mr. Adams, $39.40.
23. Paid the King Coal Co. $30.00 for coal to be used in heating store building.
24. Paid local newspaper $32.00 for advertising.
26. Paid J. H. Bishop & Co. $246.00 in full of account.
27. Purchased on account from Chicago Wholesale Co., merchandise, $450.00.
30. Paid the following expenses for the month:

Light	$ 4.00
Telephone	5.00
Telegraph	3.00
Sales salaries	120.00
Stenographer and bookkeeper	100.00

Instructions:

Draw a line lengthwise through the center of a sheet of note paper. On the left of the line write the debit items and on the right of the line the credit items resulting from the foregoing transactions. Merchandise purchased will be recorded as "purchases," and merchandise sold as "sales." The first two transactions when recorded will appear as follows:

Purchases	$246.00	J. H. Bishop & Co. .	$246.00
Administrative Expense	60.00	Cash	60.00

CHAPTER VI

THE CONSTRUCTION AND INTERPRETATION OF PARTICULAR ACCOUNTS

Certain facts to be considered in interpreting accounts. In the preceding chapter the use of accounts as a means of obtaining the information necessary to make the accounting reports which are needed in the business and the general principles regarding the construction of accounts have been discussed. The analysis of business transactions according to their effect on the various accounts has also been considered. The next step is to explain the application of these principles in the construction and interpretation of particular accounts.

In order to understand the construction and interpretation of an account, three things must be considered: (1) The object or purpose of the account, i.e., the information which it is desired to obtain from the account. (2) The transactions which are to be recorded in it or the debits and credits which are made to it. (3) What the balance of the account represents and what disposition is made of this balance on the accounting reports.

The following discussion considers certain typical accounts, the ones selected being such as would ordinarily be required in a small retail business like that of Mr. Williams. The aim of the discussion is to apply each of the three tests stated above to the interpretation of each of the accounts considered. Later, still other accounts will be considered in the same manner.

Cash account. The term *cash*, as used in accounting, refers to money of all kinds and to commercial paper such as will pass readily as a medium of exchange. Such paper includes personal checks, cashiers' checks, bank drafts, so-called travelers' checks, and postal and express money orders. It also includes funds on deposit with the bank.

The purpose of the cash account is to show the cash received, cash paid out, and the difference, or the cash on hand. This account, therefore, is affected by every transaction which involves either the receipt or payment of cash.

The debits and credits to the cash account are as follows:

CASH

Debit:	Credit:
With cash received. Usually this account is not debited with individual cash items, but for daily, weekly, or monthly totals.	With cash paid. Usually this account is not credited with individual cash items, but for daily, weekly, or monthly totals.

The balance of the cash account must always be on the debit side, since cash is an asset and it is impossible to disburse more cash than is on hand. The balance represents the amount of cash actually on hand and available for use in the business. It may be that through some error the amount which is shown as that which should be on hand does not agree with that which is actually on hand. If so, it is very important that this should be learned, the reason accounted for, and the error corrected. For this reason it is desirable that a *proof of cash* should be made from time to time to check the accuracy of the cash balance. This involves the ascertainment of the total cash on hand by adding the amount of cash credited at the bank to the cash held by the business in any form outside of the bank and comparing this with the total shown by the cash account. In many businesses such a proof is made daily. It certainly should be made at frequent intervals.

Accounts with debtors. In most businesses merchandise is sold on credit. In a retail business goods are usually sold on open account, i.e., oral promises are received in payment for them. In some cases, however, written promises or notes are received in payment of the merchandise or in payment of the oral promises originally received in payment for merchandise. On the balance sheet the written payments of customers are shown as notes receivable and the oral promises are shown as accounts receivable. It is desirable, therefore, to have accounts from which the amount of each of these items can be obtained.

Notes receivable. Since written promises received from customers are not usually numerous, it is customary to record all notes receivable in one account. The amount due from each customer on notes can be determined at any time by examining the amount of the notes on hand. The date of payment or other information desired about the

note can be determined in the same manner. It is not necessary, therefore, to have a separate account with the notes due from each customer.

The purpose of the "Notes Receivable" account is to show the notes received from others, the amount received from them in payment of these notes, and the balance, which is the amount of notes receivable now held by the business. The correctness of this amount can be ascertained by comparing it with the amount of notes on hand.

The debits and credits to the "Notes Receivable" account are as follows:

NOTES RECEIVABLE

Debit:	*Credit:*
With the face value of all notes received in favor of the business.	With the amount of cash or other property received in payment of notes. With the face value of any notes transferred or disposed of.

Since the "Notes Receivable" account is always debited for the face value of the notes received and credited with the face value of notes paid, canceled, or surrendered, it is quite clear that the balance of this account must always be on the debit side, since the business will not receive more in payment of notes than there is due. The balance is shown on the balance sheet as a current asset.

Accounts receivable. In a retail business the oral promises received from customers are usually quite numerous; consequently, unlike notes receivable, it is necessary to have a separate account or record with each customer. There are many different methods employed in keeping a record of the amount due from customers. The purpose of the present discussion, however, is to explain to the student the principles involved in the construction of accounts rather than the practices of any particular business. Consequently, a consideration of special methods of recording accounts receivable will be postponed for the present.

The purpose of the accounts receivable, or "customer's" account, is to show the oral promises received from a customer to whom merchandise has been sold on account, the amount paid by the customer in settlement of the amount due, and the balance, which represents the amount remaining unpaid.

The debits and credits to a customer's account are as follows:

ACCOUNTS RECEIVABLE

(Separate Accounts with Each Customer)

Debit:	Credit:
With the amount of the account sales of merchandise to a customer.	With cash received from a customer to apply on account. With a note or other property received to apply on account. With any allowance or deduction made to a customer.

Since customers will not pay more than they owe and the debit side shows the amount due and the credit side the amount paid, it follows that the debit side will always be the larger. The sum of the balances of all the customers' accounts is shown on the balance sheet as a current asset under the heading of "Accounts Receivable."

Accounts with creditors. When a business sells merchandise on credit it usually finds it necessary to purchase on credit, in which case it may give either its written or its oral promises in payment of the merchandise purchased. The written promises are shown on the balance sheet as "Notes Payable" and the oral promises as "Accounts Payable." Since these items are shown separately on the balance sheet, separate accounts must be carried with them. Separate records also facilitate the prompt payment of debts due to creditors.

Notes payable. The notes issued by the business in favor of others are usually not numerous, so notes payable, like notes receivable, are recorded in one account. As will be explained later, there is sometimes another record besides the ledger account kept with both notes receivable and notes payable, but in any case only one ledger account is kept with each.

The purpose of the notes payable account is to show the notes issued in favor of others by the business, the amount paid in liquidation of these notes, and the balance, or the notes still owed. This account is affected by all transactions which increase or decrease the amount of the notes of the business outstanding.

The debits and credits to the Notes Payable account are as follows:

NOTES PAYABLE

Debit:	Credit:
With the amount paid in settlement of notes owed.	With the face value of notes issued by the business.

The credit side of the Notes Payable account is always the larger and the balance is shown on the balance sheet as a current liability.

Accounts payable. The accounts payable of the ordinary wholesale or retail mercantile business are usually not so numerous as its accounts receivable. To make a record of them, therefore, is not so burdensome a task. Although in some businesses a separate ledger account is not kept with each creditor, for the purpose of the present discussion and illustrations such a practice may be assumed.

The purpose of an accounts payable or "creditor's" account is to show the oral promises issued by the business to a creditor from whom merchandise has been purchased on account, the amount paid in settlement thereof, and the balance or the amount still owed to the creditor. A creditor's account is affected by all transactions which cause an increase or decrease in the amount due him.

The debits and credits to a creditor's account are as follows:

ACCOUNTS PAYABLE
(Separate Accounts with Each Creditor)

Debit:	Credit:
With cash paid or notes issued to a creditor to apply on account. With allowances or deductions granted by a creditor which decrease the amount owed.	With purchases of merchandise on account from a creditor.

Since more will not be paid to a creditor than is owed to him, except by mistake, the credit side of this account should always be the larger. The balance of the account is a current liability and is so shown on the balance sheet.

Accounts with fixed assets. In a previous chapter it is stated that the assets of a business may be divided into two classes: those which are in the form of cash or which will be liquidated in cash within a

relatively short time in the regular operations of the business, and those which the owner plans to retain in the business. As previously explained, the former are known as current assets and the latter as fixed assets. The construction and interpretation of the accounts with some of the principal current assets, such as cash, accounts receivable, and notes receivable, has been discussed. The construction of accounts with such fixed assets as office furniture and delivery equipment may now be examined.

In every business certain equipment, such as desks, chairs, tables, counters, typewriters, adding machines, etc., is employed. This equipment is known by various terms, but may appropriately be called "office equipment." The business, of course, does not purchase this equipment for purposes of resale, although, of course, it may be sold as scrap when the asset can no longer be used in the business. The manager intends to retain it for use in the business, and such use, of course, will cause it to decrease steadily in value. This decrease in value takes place during the entire life of the asset, and its amount should be distributed over the period of its life.

For instance, if the proprietor purchases for $100 a typewriter which will give satisfactory service for ten years, and has a scrap value of $20 at the end of that time, his investment in the typewriter has evidently declined in value during that period by the amount of $80. This yearly decrease in value of the typewriter, due to its use in the business, which is known in accounting as "depreciation," must be shown in the accounting records in two ways. It must be shown as a deduction from the asset value of the typewriter and it must also be shown as an expense of the business. The student should readily realize that if the typewriter will be decreased in value $80 in ten years, it would be unwise to wait until the end of ten years and then show the entire decrease. The balance sheets made up in the meantime would show the typewriter at its original value of $100, which would be clearly erroneous. This yearly decrease in value should also be treated as an expense of conducting the business, just as a yearly rental of $8 would be treated.

The proper recording of the depreciation which arises from their use in the business is the chief accounting problem in connection with the accounting for fixed assets. With a very few exceptions, such as certain kinds of land, or the roadbed of a railroad, this depreciation

is continually going on in connection with fixed assets, and it is emphasized at this point so that the student will see from the very beginning of his study of accounting that no accurate or trustworthy reports can be made concerning the financial condition of a business unless the depreciation of its fixed assets is taken into consideration.

As stated in chapter iii, it is customary for the owner to retain or reserve in the business sufficient of his profits to cover the amount of the estimated depreciation of his fixed assets. This estimated decrease, which is called a "reserve for depreciation," is, as illustrated in the preceding chapter, shown on the balance sheet as a deduction from the original cost of the asset. For instance, in the balance sheet of W. A. Williams his furniture and fixtures are shown as follows:

Furniture and fixtures	$500.00
Less reserve for depreciation	50.00
	$450.00

If the original cost of the fixed asset and the amount by which it has depreciated are to be shown as separate items on the balance sheet, it will be realized, since this information is obtained from the accounts, that two accounts must be kept with each fixed asset subject to depreciation. The construction and interpretation of these accounts for such fixed assets as are necessary for a retail business such as that of W. A. Williams will be discussed below.

Office Furniture or Equipment. Under this heading is included the property purchased for use in the office of a business, such as desks, typewriters, safes, filing cabinets, bookcases, chairs, tables, etc. In a small business, counters, show cases, etc., may be included under this heading, though in most cases a separate account called "store fixtures" is kept with such property.

It has been explained that two accounts may be kept with such property, one with the asset itself and one to show the amount by which the asset has depreciated. The purpose of the office furniture account is to show the *cost* of such equipment purchased, the cost of the equipment disposed of or no longer used in the business, and the balance, which represents the cost of the equipment employed in the conduct of the business.

The debits and credits to this account are as follows:

FURNITURE AND FIXTURES

Debit:	Credit:
With the cost value of furniture and fixtures purchased.	With the cost value of furniture and fixtures sold, exchanged, destroyed, or discarded.

The balance of this account shows the cost value of the furniture and fixtures used in the conduct of the business and is shown as a fixed asset on the balance sheet.

Reserve for Depreciation of Office Furniture. The purpose of the reserve for depreciation of furniture and fixtures account is to show the net amount of the reserve created to take care of the decrease in value of the property used in the office.

The debits and credits to this account are as follows:

RESERVE FOR DEPRECIATION OF FURNITURE AND FIXTURES

Debit:	Credit:
With the cost value of furniture and fixtures discarded or destroyed. With the excess of the cost over the selling price of furniture and fixtures sold.	At the close of each fiscal period with the amount of depreciation of the furniture and fixtures which is estimated to be properly chargeable against that period's operations.

After adjustment at the end of a period, the balance of this account shows the total amount which has been charged against revenue up to date for depreciation on the furniture and fixtures which are still in use. The balance should appear on the balance sheet as a deduction from the furniture and fixtures account. In case of the loss of a fixed asset through accident, such loss not properly falling under the head of depreciation, the asset account would be credited for the cost of the property destroyed, and the reserve for depreciation account would be debited with an amount representing the estimated accrued depreciation on the property to date. The difference between the cost of the asset and the accrued depreciation would be debited to a special account, such as "Loss from Fire."

If an account is kept with store fixtures, it will be necessary to keep also a reserve for depreciation of store fixtures account. The principles governing the construction of these accounts and the treat-

ment of their balances are exactly the same as in the case of furniture and fixtures. It is accordingly not necessary to give a discussion of them here.

Delivery Equipment. The purpose of the account with delivery equipment is to show the cost of property purchased for use in delivering goods. This includes cost of teams, wagons, harness, automobiles, or any other conveyances that may be used by the business in delivering goods to customers. Cost of repairs to delivery equipment must not be charged to this account, but to the delivery expense account.

The debits and credits to this account are as follows:

DELIVERY EQUIPMENT

Debit:	*Credit:*
With *cost* of property purchased for use in delivering goods to customers.	With the *cost* price of any property sold or discarded which has previously been charged to this account.

The balance of this account shows the cost value of the delivery equipment on hand. It is shown as a fixed asset on the balance sheet.

Reserve for Depreciation of Delivery Equipment. As with other fixed assets, it may be desirable to keep two accounts with delivery equipment. The first, as explained and illustrated above, shows the cost of the asset. The second, as explained and illustrated below, records the estimated amount of the depreciation which has resulted from the use of the asset in the business.

The purpose of the reserve for depreciation of delivery equipment account is to show the net amount of the estimated decrease in value of the property purchased for delivery purposes.

The debits and credits to this account are as follows:

RESERVE FOR DEPRECIATION OF DELIVERY EQUIPMENT

Debit:	*Credit:*
With the cost price of delivery equipment discarded. With the excess of the cost over the selling price of delivery equipment sold.	At the close of each fiscal period with the estimated depreciation of delivery equipment charged to the operations of that period.

The balance of this account is shown on the balance sheet as a deduction from the amount of the delivery equipment account. It represents

the amount which has been charged off to date for depreciation on such of this class of property as is still in use in the business.

Accounts with proprietorship. In the preceding chapters it has been repeatedly emphasized that proprietorship is the excess of the total assets of a business over its total liabilities, or the owner's net investment in the business. The amount of this net worth can be obtained at any time by taking the difference between the total assets and total liabilities. But, as has been pointed out previously, it is customary to maintain at all times a balance between the total of the debits and of the credits. For this reason accounts are kept with proprietorship. An account is maintained which shows the amount of the original investment made by the proprietor, all additions to that investment, and all subtractions from it. Also at the end of each fiscal period the net profit or loss of the business for the period is added to or subtracted from the figure of the net investment shown by the account, which then reflects the status of the proprietor's net interest at that time. This account is usually known as the proprietor's "capital" account.

Debits and credits will be made to this account as follows:

PROPRIETOR'S CAPITAL ACCOUNT

Debit: With all withdrawals of investment. With the net loss for the accounting period.	*Credit:* With the amount of the proprietor's original investment. With all additions made to that investment. With the net profit for the accounting period.

So long as the owner has any proprietorship in the business, this account will always show a credit balance. If it should happen that the liabilities of the business are in excess of the assets, the business is insolvent and normally would not continue to operate. When such a condition exists, the balance in the proprietor's capital account will appear on the debit side and show the amount of the discrepancy between assets and liabilities, that is, the amount of the deficit. The credit balance which normally appears in this account is shown on the balance sheet, being added to the total of the liabilities, the total of liabilities and proprietorship being equal in amount to the total of assets.

In a business with a single proprietor, it is customary to keep an account showing the amount of the drawings of the owner and the amount that is supposed to be subject to his withdrawal, according to the plans of the business. Such an account is known as the proprietor's "personal" account. It is supposed to reflect the amounts which the proprietor draws during the fiscal period for his personal needs and in anticipation of the period's profits. As already shown, any withdrawals intended to reduce permanently the original or accumulated investment will be shown, not in this account, but in the capital account. In many cases the proprietor allows himself a fixed salary, which may represent the amount which he intends to withdraw each period out of profits. Where this scheme is followed, this salary is charged as an expense in the group of administrative expenses, and the amount so charged is credited to the personal account of the owner. In such a case the balance of the account will show at any time whether the owner has withdrawn more or less than the amount of salary with which he has been credited up to that time.

The debits and credits to the personal account are as follows:

PROPRIETOR'S PERSONAL ACCOUNT

Debit:	*Credit:*
With amounts drawn by the owner against anticipated current profits or salary allowance.	With periodical allowance for salary of the owner.

As stated above, this account may show either a debit or a credit balance, depending on whether the allowance made for the owner's salary has been overdrawn or left partly undrawn. In either case the balance of this account must be considered in conjunction with the balance of the capital account in order to ascertain the exact net proprietorship at a given time. A credit balance in the personal account is to be added to the balance in the capital account to show total proprietorship, while a debit balance, representing an overdraft, or advance drawing against profits, is to be deducted. The distinction between personal and capital accounts is more important where there is more than one owner; that is, in a partnership. There it is important to know how much each of the owners is entitled to draw and how his drawings stand in relation to that amount at any given time.

QUESTIONS FOR CLASS DISCUSSION

1. You are requested to examine the accounts of the X.Y. Manufacturing Company to determine whether they are maintained in such a way that they provide accurate and comprehensive information for the accounting reports. What information would you desire with reference to each account in order to determine this?
2. James King is employed as bookkeeper by the X.Y. Manufacturing Company. He is unfamiliar with the account titles which they use. What will he need to know with reference to each account in order to perform his duties intelligently?
3. In inspecting the ledger of the X.Y. Manufacturing Company you find that the cash account shows a credit balance of $100.00. What would you infer from this?
4. How would you proceed to prove the correctness of the balance of the cash account?
5. On January 1 H. B. Jones owes the business $100.00. In response to a request for payment he sends $40.00 in cash and his thirty-day note for $60.00. What entries would be made in the accounts when the cash and note are received from Jones?
6. On the ledger of the A.B. Company the account of J. R. Baker appears as follows:

J. R. BAKER

January 1	....	80	00	January 12	....	80	00
22	....	40	00				

Is Baker a customer or a creditor of the company?

7. On the same ledger the account of T. W. Torr appears as follows:

T. W. TORR

January 10	....	76	00	January 25	....	76	00

Is Torr a creditor or a customer of the company?

8. On January 1 H. R. DuPont purchases delivery equipment which costs $3,000.00. On December 31 should this asset be shown on the balance sheet at cost? If not, how would you determine the amount at which it should be shown?
9. At the end of the fiscal period your employer estimates that his office furniture has depreciated during the year to the amount of $40.00. In what way would you treat this depreciation in making a balance sheet? How would it be treated on the statement of profit and loss?

10. How is depreciation on fixed assets shown in the accounts?
11. The following transactions were performed by James Monroe, single proprietor:

Jan.	1.	Invests $2,000.00 in cash.
Feb.	3.	Makes an additional investment of $200.00.
Mar.	1.	Withdraws $50.00 for personal use.
June	1.	Withdraws $70.00 for personal use.
July	2.	Makes an additional investment of $1,500.00.
Sept.	30.	Decides to reduce his investment and withdraws $1000.00.
Oct.	1.	Withdraws $80.00 for personal use.
Dec.	31.	Determines from his statement of profit and loss that his profits for the year are $800.00.

Explain how the above transactions would be shown in the proprietor's capital and personal accounts.

REFERENCES FOR FURTHER STUDY

Sprague, Charles E., *Philosophy of Accounts*, chaps. vi, vii, viii, ix.
Mitchell, T. W., *Accounting Principles*, chap. xi.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chaps. xii, xiii.
Stockwell, H. G., *Net Worth and the Balance Sheet.*

LABORATORY EXERCISE NO. 11

Illustration of Balance Sheet Accounts

On January 1, 1919, you are employed as bookkeeper by G. T. Davies. Mr. Davies' accounting system consists of only memorandum records. You find it necessary to open new records for him. With his aid you determine that his assets and liabilities are as follows:

Cash	$1,300.00
Notes receivable	40.00
Accounts receivable	3,800.00
Merchandise inventory	3,200.00
Office furniture	450.00
Building	2,000.00
Land	1,000.00
Notes payable	1,300.00
Accounts payable	2,700.00

Instructions:

On ledger paper open the accounts necessary to show the financial condition of Mr. Davies on January 1, 1919. Allow ten lines for each account.

LABORATORY EXERCISE NO. 12

Illustration of Balance Sheet Accounts

During the month of January, Davies performs the following transactions:

Jan. 1. Receives cash from customers to apply on account, $320.00.
2. Pays for the erection of an additional room to the building, $800.00.
3. Receives from customers to apply on account, $240.00.
4. Receives a note from a customer to apply on account, $80.00.
6. Pays creditors to apply on account, $120.00.
10. Withdraws for private use, $60.00.
12. Purchases a desk for office use, $65.00.
14. Gives a thirty-day note for $110.00 to a creditor to apply on account.
16. Receives $60.00 in payment of a note due from a customer.
20. Makes an additional cash investment, $300.00.
22. Pays a note due to a creditor, $45.00.
25. Pays creditors to apply on account, $240.00.
26. Receives from customers to apply on account, $200.00.
28. Withdraws for private use, $80.00.
30. Reduces his investment in the business by withdrawing $300.00 in cash.

Instructions:

Make the entries on the ledger which are necessary to record these transactions.

Preserve this exercise for future use.

CHAPTER VII

THE CONSTRUCTION AND INTERPRETATION OF ACCOUNTS—*Concluded*

Accounts with merchandise. Merchandise is a general term applied to goods bought and sold by a mercantile business, such as groceries, dry goods, hardware, etc. In accounting, merchandise bought is termed "purchases," merchandise sold is termed "sales," and the merchandise on hand at the beginning or end of a fiscal period is termed "merchandise inventory." It is from the purchase and sale of merchandise that the owner of a mercantile business expects to derive his profit, and most of the current transactions which such a business performs pertain to purchases and sales.

By referring to the statement of profit and loss given in chapter iv, it will be seen that sales, purchases, and inventory are shown as separate items, therefore there must be some means by which the amount of each can be obtained at the end of the fiscal period. The amount of the purchases and sales for the period are obtained from the ledger accounts which are kept for the purpose. The inventory of merchandise is usually obtained by making a physical count of the goods in stock, and determining their value at cost price. At the end of the fiscal period, after the amount of the inventory is thus determined, it is customary to open an account to record its amount. The present discussion will be confined to a consideration of the accounts with purchases, sales, and inventory. In subsequent chapters the use of other accounts to provide more detailed information concerning merchandise will be discussed.

The purchases account. The use of the purchases account is peculiar to mercantile concerns. Its purpose is to show the cost of goods purchased. Only purchases of goods intended for resale are recorded in this account. Purchases of fixed assets, of raw materials for manufacturing, or of miscellaneous supplies, such as pens, paper, clips, etc., must be recorded in separate accounts.

The debits and credits to the purchases account are as follows:

PURCHASES

Debit:	Credit:
With the invoice price of merchandise purchased. With the amounts paid for freight and drayage on merchandise purchased, if a separate account is not kept with these items.	Allowances and deductions are sometimes credited to this account, but it is better to have a separate account for them, as will be explained later.

The balance of this account shows the cost of goods purchased and is shown on the statement of profit and loss as an item of cost of goods sold.

The sales account. The purpose of the sales account is to show the amounts received from the sale of merchandise, manufactured product, or services, as the case may be. For the present, the discussion will be confined to mercantile businesses, and only sales of merchandise will be considered.

The debits and credits to this account are as follows:

SALES

Debit:	Credit:
Allowances and deductions to customers are sometimes debited to this account, but it is better to have a separate account, as will be explained later.	With the selling price of merchandise sold.

The balance of this account shows the amount of sales made during the fiscal period and is shown as the principal item of income on the statement of profit and loss.

The inventory account. Entries are made in the inventory account only at the end of the fiscal period. Its construction and use may be better explained, therefore, in connection with the discussion of the summary of operations at the end of the fiscal period. Consequently the discussion of this account will be postponed until the following chapter.

Accounts with operating expenses. As previously stated, the nature and the amount of the operating expenses are determined in the main by the size, nature, and organization of the business. In turn, the nature and amount of the expenses determine to a considerable extent their sub-classifications and the accounts which are kept to record them. In deciding what accounts should be kept with expenses it should always be remembered that, although it is important to have information which will show what the expenses have been for a certain period, it is equally important to have information which will make possible plans for the reduction of expenses during succeeding periods.

Usually the operations of a business are capable of a more or less definite classification. For instance, the operations of a mercantile business may be classified as follows: purchasing goods; selling goods; transporting and delivering goods; and administering the business as a whole. Of course, each of these classes of operations is capable of considerable subdivision, but they indicate fairly well the operations of a business of average size. The expenses of a mercantile business may accordingly be classified as follows: (1) buying expenses; (2) selling expenses; (3) drayage and delivery expenses; (4) administrative expenses.

If such a classification is used, there must be at least one account with each class. Of course there may be several accounts kept with each of these divisions. For the sake of simplicity it will be assumed that only one account will be kept with each class of expense. The more detailed accounts will be introduced later.

Buying expenses. The purpose of the account with buying expenses is to show the expenses incurred in the purchase of merchandise. In a store which does not have one or more buyers to devote their entire time to the purchase of merchandise, this function may be performed by the owner, manager, or other executive of the business. In this case the proportionate part of the salary of the person who performs the duties of the buyer may be treated as a buying expense. Similarly, the estimated number of hours a week given by any member or members of the office force to buying may be charged to this account. This account should also be charged with traveling expenses of buying trips and other miscellaneous buying expenses.

The debits and credits to this account are as follows:

BUYING EXPENSES

Debit:	Credit:
With all expenses incurred in the purchase of merchandise.	With any adjustments which reduce the amounts debited to this account.

The balance of this account shows the expenses incurred in the purchase of merchandise and is shown in the statement of profit and loss as an operating expense.

Selling expenses. The purpose of the account with selling expenses is to show the expenses incurred in the sale of merchandise. The wages and other remunerations of sales persons, order takers, and all others engaged in selling should be treated as selling expense. If it is the duty of some executive to supervise the sales department of the business, his salary should also be charged to this account. Expenditures for advertising purposes such as space in newspapers, periodicals; space on the street cars and billboards; circulars and postage thereon; advertising novelties; charitable donations; window display, etc., should be treated as a part of selling expense. Such expenses may be charged to an advertising account, but if so, they should be added to the other selling expenses in arriving at the total sales expense of the business. In addition to the above, the cost of wrapping paper, cartons, twine, salesmen's order books, and all other items of direct selling expense should be charged to this account.

The debits and credits to this account are as follows:

SELLING EXPENSES

Debit:	Credit:
All expenses incurred in connection with the sales of merchandise.	With any adjustments which reduce the amount of the charges made to this account.

The balance of this account shows the expenses incurred in the sale of merchandise and is shown in the statement of profit and loss as an operating expense.

Accounts with delivery expense and drayage expense. In every mercantile business there are certain expenses incurred in connection

with the local transportation of merchandise. In a retail business the goods purchased must be transported from the railroad depot to the storeroom of the business. Such transportation may be performed by the business itself or it may employ others to do it. In either case certain expenses are incurred. These expenses—usually known as drayage—constitute a part of the cost of the merchandise and are added to the invoice price in arriving at the cost of the goods sold.

Then, too, a retail business usually incurs certain expenses in connection with the delivery of goods sold to customers. This expenditure constitutes an operating expense and may be shown on the accounting reports as a separate item or as a subdivision of selling expense.

In a wholesale business certain expenses are incurred in connection with transporting merchandise from the railroad depot to the warehouse of the business. As in the case of the retail business, these expenses—known as drayage expenses—constitute a part of the cost of the goods purchased. The wholesale company also incurs expenses in connection with transporting goods sold from its warehouse to the railroad depot. As in the case of the delivery expenses in the retail business, these expenses—by whatever name known—constitute a selling expense. Sometimes the wholesale company uses the same equipment to deliver goods to the depot and bring goods from the depot, in which case, it may be impracticable to attempt to keep the cost of these two services separately. In this case the total cost is recorded in one account and at the end of the period it is allocated on some rational basis between the cost of goods purchased and selling expense.

In the following discussion, the term "delivery expense" will be used to refer to the cost of delivering goods sold, whether these goods are delivered directly to the purchasers, as in the case of the retail business, or only to the railroad depot, as in the case of the wholesale business.

The purpose of the account with delivery expense is to show the cost of delivering merchandise to customers. Wages of employees engaged in delivering the goods should be treated as delivery expense. In addition, all stable and garage expenses, also all repairs, licenses, upkeep, and depreciation of delivery equipment should be charged to this account.

The debits and credits to this account are as follows:

DELIVERY EXPENSE

Debit:	Credit:
All expense incurred in connection with the delivery of merchandise.	With any adjustments which reduce the amount debited to this account.

The balance of this account shows the cost of delivering merchandise to customers and may be shown in the statement of profit and loss as a separate item under operating expense, or it may be shown as a sub-item under selling expense.

Administrative expenses. The purpose of the account with administrative expenses is to show expenses incurred in the administration and management of the business. The various items of expense which may be charged to this account are too numerous to mention. Some of the most important, however, are salaries of the manager, bookkeepers, office clerks, stenographers, and general office help not otherwise charged. The cost of stationery of all sorts, account books, forms, typewriter supplies, printing, postage, and depreciation of office equipment, the expenses of insurance on store equipment, as well as taxes on the same; the cost of heat, light, repairs, depreciation on store equipment, and other miscellaneous items are usually charged to administrative expenses.

The debits and credits for this account are as follows:

ADMINISTRATIVE EXPENSE

Debit:	Credit:
With all expenses incurred in connection with the administration and management of the business.	With any adjustments which reduce the amounts debited to this account.

The balance of this account shows the cost of the administration and management of the business and is shown as an operating expense in the statement of profit and loss.

Arrangement of accounts in the ledgers. As explained in chapter v, the accounts of a business are arranged in systematic order in the ledger. Usually they are arranged in the ledger in the same order in which they appear on the balance sheet and on the statement of profit and loss. On the balance sheet the items are listed as follows:

current assets, fixed assets, current liabilities, and proprietorship. In the ledger the accounts necessary to provide the information from which the balance sheet is made are arranged in the same order. In the statement of profit and loss the items are as follows: sales, cost of goods sold, and expenses. In the ledger the accounts necessary to obtain the amount of each of these items are arranged accordingly.

The accounts in the ledger should always be arranged in the same order in which they appear in the balance sheet and the statement of profit and loss. This arrangement facilitates the making of the reports and the comparison of the reports with the accounts.

Summary. In chapter v it has been explained that the primary function of the account is to provide a classified and summarized record of the information which the owner needs in the management of his business. This information he obtains by means of reports such as the balance sheet and statement of profit and loss. The accounts of a business should provide, therefore, the information necessary to make such reports.

In the present and the preceding chapter the construction and interpretation of the accounts necessary to provide the information shown on the simple balance sheet and statement of profit and loss of W. A. Williams have been discussed. Later, when more comprehensive reports are discussed, it will be seen that additional accounts must be maintained. If the student has mastered the principles governing the use and construction of the accounts discussed in these two chapters, he will have little difficulty in applying these principles to the accounts which will be discussed in subsequent chapters.

QUESTIONS FOR CLASS DISCUSSION

1. On June 1 K. P. Spear had $2,000.00 of merchandise on hand. During the month he purchased $5,000.00 of merchandise and sold $6,000.00. How would these facts be recorded in the accounts?
2. How would he determine the amount of his merchandise on hand at the end of the month?
3. J. P. Long, retail dry goods merchant, makes the following cash payments:
   a) For dry goods, $300.00.
   b) For repairs to delivery truck, $20.00.
   c) For services of delivery driver, $40.00.
   d) For wrapping paper and twine, $15.00.
   e) For an adding machine, $250.00.

   How would these transactions be recorded in his accounts?

4. What information is required in order that the cost of goods sold may be shown on the statement of profit and loss? Explain how this information is obtained.
5. You are employed by the Jones Company as general manager. You find by an inspection of the accounting reports submitted by the bookkeeper that all the expenses of the business are recorded in one expense account termed "miscellaneous expense." As general manager should you regard this method desirable? Why?
6. What basis or system would you instruct the bookkeeper to use in recording the expenses?
7. The following represents the "miscellaneous expense" account of the Jones Company for the first eight days of July:

MISCELLANEOUS EXPENSE

July 1	Sales salaries	25	00
	Errand boy	5	00
	Repairs to delivery wagon	8	00
2	Janitor	15	00
	Rent for month	80	00
	Wrapping paper	4	00
3	Newspaper advertising	8	00
	Traveling expenses to Chicago to buy goods	10	00
	Repairs to store fixtures	6	00
5	Handbills printed	6	60
	Paid boys to distribute handbills	4	90
6	Sales salaries	30	00
	Errand boy	6	00
	Stenographer	18	00
	Light bill	4	20
	Gas bill	6	40
8	Repairs on typewriter		90
	Stationery for office	10	00
	Repairs to building	12	00

Making any assumptions you deem necessary, what classification should you instruct the bookkeeper to make of these expenses?

8. The expenses of A. S. Joesting, retail merchant, during the month of August as shown by his check stubs are as follows:

1. Salaries of sales clerks $120.00
2. Salary of stenographer 20.00
3. Office boy 36.00
4. Repairs on delivery truck 10.00
5. Gasoline for delivery truck 4.70
6. Repairs on typewriter 1.90

7.	Traveling expenses of Joesting on buying trip	$ 42.70
8.	Repairs on adding machine	2.40
9.	Telephone bill	6.40
10.	Telegrams and long distance calls in purchasing goods	7.40
11.	Repairs on office furniture and fixtures	2.80
12.	Gasoline for delivery truck	2.90
13.	Salaries of sales clerks	200.00
14.	Salary of delivery man	32.00
15.	Gasoline for delivery truck	2.70
16.	Advertising circulars	20.00
17.	Paid for distributing circulars	9.00
18.	Salary of stenographer	20.00
19.	Janitor	15.00
20.	Errand boy (sales)	2.40
21.	Light for store	6.40
22.	Commissions of sales clerks	40.00
23.	Gasoline for delivery truck	2.80
24.	Salaries of sales clerks	200.00
25.	Delivery driver	34.00
26.	Office boy	16.00
27.	Rent	80.00

You decide that Mr. Joesting should have his expenses classified under the following heads:

a) Buying expense
b) Selling expense
c) Delivery expense
d) Administrative expense

Show how the foregoing expenses would be classified under these four heads.

9. J. M. Jones is a retail merchant, H. P. King is a manfacturer, and J. H. Bishop is a lawyer. Would their expenses be classified in the same manner? Why?

10. State the proper arrangement of accounts in the ledger and the reasons for such an arrangement.

REFERENCES FOR FURTHER STUDY

Sprague, Charles E., *Philosophy of Accounts*, chap. xii.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xiv.
Mitchell, T. W., *Accounting Principles*, chap. x.

LABORATORY EXERCISE NO. 13

Illustrations of Classification of Transactions by Means of Accounts

The following transactions are to be recorded in the ledger. Be careful to make the proper debit and credit for each transaction. Set up in the ledger (loose ledger sheets) the following accounts on the pages indicated:

Cash	1	French Bros.	6
Notes Receivable	1	Meyer & King	6
F. M. Jones	2	H. P. Johnson	7
Martin Hotel	2	J. A. McCoy & Co.	7
Congress Hotel	2	Gartman Bros.	7
M. J. Torr	3	J. B. Moseley, Proprietor	8
B. K. Shaeffer	3	J. B. Moseley, Personal	8
M. M. McGee	3	Sales	9
J. J. Reighard	4	Purchases	9
J. W. Baker	4	Selling Expense	10
Inventory	5	Administrative Expense	10
Office Furniture	5	Buying Expense	10
Ames & Co.	6		

June 1. J. B. Moseley invests $3,000.00 in the retail store business.
2. Bought of Ames & Co. on account, merchandise, $82.50.
3. Bought of French Bros. on account, merchandise, $128.60.
4. Paid rent for the month, $40.00.
5. Sold F. M. Jones on account, merchandise, $18.40.
Bought of J. A. McCoy & Co. for cash, merchandise, $198.00.
6. Received for sundry cash sales to date, $30.00.
Paid Ames & Co. in full of account, $82.50.
8. Sold Martin Hotel on account, merchandise, $62.40.
Paid salary of sales clerk, $24.00.
9. Received $10.00 from F. M. Jones to apply on account.
10. Bought of Meyer & King on account, merchandise, $230.40.
11. Paid as expenses of a buying trip, $43.00.
Sold F. M. Jones on account, merchandise, $64.20.
12. Received from the Martin Hotel to apply on account, $30.00.
13. Received $60.00 for sundry cash sales to date.
Paid French Bros. $128.60 to apply on account.
14. Sold J. W. Baker on account, merchandise, $46.80.
Paid salary of sales clerk, $24.00.
15. Bought of Ames & Co. on account, merchandise, $256.00.
16. Sold Congress Hotel on account, merchandise, $69.40.

17. Bought of H. P. Johnson on account, merchandise, \$34.00.
18. Received of J. W. Baker \$36.00 to apply on account.
    Paid O. M. Haines \$100.00 for office furniture.
19. Sold M. J. Torr on account, merchandise, \$48.50.
21. Received \$50.00 for sundry cash sales to date.
22. Sold B. K. Shaeffer on account, merchandise, \$28.40.
23. Bought of J. A. McCoy & Co. on account, merchandise, \$187.40.
24. Received from the Martin Hotel in part payment of amount due, \$15.00.
    Paid Meyer & King \$180.00 to apply on account.
25. Sold Martin Hotel on account, merchandise \$70.40.
26. Received of F. M. Jones \$8.40 to apply on account.
    Sold M. M. McGee on account, merchandise, \$60.40.
27. Sold J. J. Reighard on account, merchandise, \$62.25.
28. Received \$48.50 for sundry cash sales.
    Bought of Gartman Bros. on account, merchandise, \$180.60.
29. Received \$50.00 from M. M. McGee to apply on account.
30. Paid Ames & Co. \$150.00 to apply on account.
    Paid bookkeeper's salary, \$60.00; salary of sales clerk, \$48.00.
    Received note for \$48.50 from M. J. Torr to apply on account.
    Moseley withdrew for private use, \$40.00.

Instructions:

Record these transactions in the accounts.

Preserve this exercise for future use.

CHAPTER VIII

THE TRIAL BALANCE

Purpose of the trial balance. In chapters v, vi, and vii, the account has been discussed as a means of making a current record of transactions. A business transaction consists of an exchange of equal values. The values received are termed debits and the values surrendered are termed credits. To record a transaction one must first determine the debits and credits to which it gives rise and then record these debits and credits in the proper accounts.

Since the debits arising from each transaction are equal to the credits arising from the same transaction, it follows logically that, if a correct record is made of any number of transactions, the debits arising from these transactions will equal the credits arising therefrom. In other words, the debits recorded in the ledger should equal or *balance* the credits recorded therein. In order to see if this is true, it is customary to make periodical tests of their equality. Such a test is known as a *trial balance.* The purpose of the present chapter is to explain and illustrate how the trial balance is made.

Method of taking a trial balance. In many of the accounts there are several debits and several credits. One method of proving the equality between the total debits and the total credits would be to list and total: (*a*) all the debits recorded in all the accounts and (*b*) all the credits recorded in all the accounts, and compare the two totals. Such a procedure, however, would make the trial balance very long and inconvenient for use as a report. It is customary, therefore, before making a trial balance to go through the ledger and total each side, making a notation of the total in small pencil figures just below the last entry appearing on each side of the account.

After the totals of (*a*) the debits and (*b*) the credits of each account are obtained, the trial balance may be made in two ways: The first method is to list all the debit totals and all the credit totals and after adding to compare the total of the former with the total of the latter. The second method is to subtract the total of the debits of each account from the total of the credits of each account, or vice versa, and obtain

thereby the debit or credit balance of the account. Then the debit and credit balances of all the accounts are listed in the trial balance, and if the sum of the debit balances equals the sum of the credit balances it is evidence that the debits and credits in the ledger are equal. Either method serves equally well to test the equality of debits and credits. The latter method is more frequently used because it makes the trial balance more simple and more usable. Both methods will be illustrated.

Illustration of the trial balance. In order to illustrate how the trial balance is made, a trial balance will be made of the following simple ledger:

CASH

1919			1919		
Jan. 1	....	2,000 00	Jan. 1	....	60 00
26	....	42 00	2	....	500 00
			5	....	27 00
			8	....	120 00
			16	....	100 00
			22	....	800 00
			27	....	30 00
			31	....	78 00
			31	....	47 00

NOTES RECEIVABLE

Jan. 17	....	58 00			

R. D. JAMES

Jan. 3	....	58 00	Jan. 17	....	58 00
12	....	42 00			

G. E. FRAZER

Jan. 3	....	42 00	Jan. 26	....	42 00
12	....	23 00			

G. B. HOBBS

Jan. 3	....	29 00			
28	....	62 00			

J. S. ADAMS

Jan. 12	....	18 00			
28	....	30 00			

MERCHANDISE INVENTORY

Jan. 1	....	1,000 00			

FURNITURE AND FIXTURES

Jan. 16	....	100 00			

NOTES PAYABLE

			Jan. 24	....	120 00

N. W. BARNES

Jan. 22	....	800 00	Jan. 2	....	800 00
			20	....	78 00

L. S. LYON

Jan. 24	....	120 00	Jan. 15	....	120 00
			20	....	92 00

W. H. SPENCER

			Jan. 15	....	80 00

J. H. BISHOP, PROPRIETOR

			Jan. 1	....	2,000 00
			1	....	1,000 00

J. H. BISHOP, PERSONAL

Jan. 27	....	30 00			

SALES

			Jan. 3	....	58 00
			3	....	42 00
			3	....	29 00
			12	....	42 00
			12	....	23 00
			12	....	18 00
			28	....	62 00
			28	....	30 00

PURCHASES

Jan. 2	....	800 00	
2	....	500 00	
15	....	120 00	
15	....	80 00	
20	....	78 00	
20	....	92 00	

BUYING EXPENSES

Jan. 5	....	27 00	

SELLING EXPENSES

Jan. 8	....	120 00	
31	....	78 00	

ADMINISTRATIVE EXPENSES

Jan. 1	....	60 00	
31	....	47 00	

First method. If the total debits and credits of each account are to be shown in the trial balance it will be as follows:

J. H. BISHOP

TRIAL BALANCE, JANUARY 31, 1919

Cash	2,042 00	1,762 00
Notes Receivable	58 00	
R. D. James	100 00	58 00
G. E. Frazer	65 00	42 00
G. B. Hobbs	91 00	
J. S. Adams	48 00	
Merchandise Inventory	1,000 00	
Furniture and Fixtures	100 00	
Notes Payable		120 00
N. W. Barnes	800 00	878 00
L. S. Lyon	120 00	212 00
W. H. Spencer		80 00
J. H. Bishop, Proprietor		3,000 00
J. H. Bishop, Personal	30 00	
Sales		304 00
Purchases	1,670 00	
Buying Expenses	27 00	
Selling Expenses	198 00	
Administrative Expenses	107 00	
	6,456 00	6,456 00

Since the trial balance shows that the total of all the debits in the ledger is equal to the total of all the credits, the ledger is said to be in balance.

Second method. When the second method is employed, only the debit or credit balance of each account is shown on the trial balance. In order to show the relation between the two methods, the following illustration will be given:

J. H. BISHOP

TRIAL BALANCE, JANUARY 31, 1919

Cash	2,042 00	1,762 00	280 00	
Notes Receivable	58 00		58 00	
R. D. James	100 00	58 00	42 00	
G. E. Frazer	65 00	42 00	23 00	
G. B. Hobbs	91 00		91 00	
J. S. Adams	48 00		48 00	
Merchandise Inventory	1,000 00		1,000 00	
Furniture and Fixtures	100 00		100 00	
Notes Payable		120 00		120 00
N. W. Barnes	800 00	878 00		78 00
L. S. Lyon	120 00	212 00		92 00
W. H. Spencer		80 00		80 00
J. H. Bishop, Proprietor		3,000 00		3,000 00
J. H. Bishop, Personal	30 00		30 00	
Sales		304 00		304 00
Purchases	1,670 00		1,670 00	
Buying Expenses	27 00		27 00	
Selling Expenses	198 00		198 00	
Administrative Expenses	107 00		107 00	
	6,456 00	6,456 00	3,674 00	3,674 00

It will be seen that in the first two columns the total of the debits and the total of the credits of each account are shown. These two columns show the same results as the trial balance given in the preceding paragraph. In the last two columns the debit or credit balance of each account is shown. The balance of the account is obtained by the subtraction of the amounts shown in the first two columns, wherever the account shows both a debit and a credit total. If the account shows only a debit or credit total, this is carried over as the debit or credit balance of the account. It can be seen from this illustration that the equality of the debits and credits is shown by taking only the balance of each account just as well as if the total of the debits and the total of the credits of each account are taken.

From the foregoing illustration it can be seen that the trial balance of J. H. Bishop, showing the debit and credit balance of each account, will be as follows:

J. H. BISHOP

TRIAL BALANCE, JANUARY 31, 1919

Cash	280.00	
Notes Receivable	58.00	
R. D. James	42.00	
G. E. Frazer	23.00	
G. B. Hobbs	91.00	
J. S. Adams	48.00	
Merchandise Inventory	1,000.00	
Furniture and Fixtures	100.00	
Notes Payable		120.00
N. W. Barnes		78.00
L. S. Lyon		92.00
W. H. Spencer		80.00
J. H. Bishop, Proprietor		3,000.00
J. H. Bishop, Personal	30.00	
Sales		304.00
Purchases	1,670.00	
Buying Expenses	27.00	
Selling Expenses	198.00	
Administrative Expenses	107.00	
	3,674.00	3,674.00

The trial balance as a report. As previously stated, the primary purpose of the trial balance is to prove the equality of the debits and credits recorded in the accounts. Although this is its primary function, it may serve other purposes. The accountant as a rule uses the trial balance as the basis of his reports. The method of doing this can be explained better after the working sheet has been discussed in a subsequent chapter. The trial balance may also be of some value as a report to the owner or manager. In many businesses it is not thought feasible to make a statement of profit and loss monthly. In such cases a comparative monthly trial balance will afford some useful information to the business manager. It will enable him to compare the balance of any given asset or liability account at the end of a month with its balance at the end of any preceding month in the year. Also, the approximate amount of any kind of income or expense for the current month may be obtained by subtracting from the present balance of the account the balance of the month before. The information obtained from this statement

is not likely to be complete or accurate, but will at least indicate to the manager the general trend of the operations of the business.

REFERENCES FOR FURTHER STUDY

Paton, W. A., and Stevenson, R. A., *Principles of Accounting*, pp. 151–54.
Mitchell, T. W., *Accounting Principles*, chap. ix.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xv.

LABORATORY EXERCISE NO. 14

The ledger of H. T. Jones on September 30, after one month's operations, appears as follows:

CASH

1919				1919			
Sept. 1	....	4,000	00	Sept. 2	....	300	00
11	....	250	00	3	....	3,000	00
22	....	10	50	4	....	25	00
22	....	12	00	25	....	600	00
27	....	200	00	30	....	100	00
27	....	16	00	30	....	42	00

W. C. CHAMBERLAIN

1919				1919			
Sept. 8	....	10	50	Sept. 22	....	10	50
16	....	13	00				

O. S. GLOVER

1919				1919			
Sept. 8	....	12	00	Sept. 22	....	12	00
16	....	20	00				

H. G. MOULTON

1919							
Sept. 8	....	18	00				

L. C. SORRELL

1919				1919			
Sept. 16	....	16	00	Sept. 27	....	16	00
28	....	14	00				

MERCHANDISE INVENTORY

OFFICE FURNITURE

1919 Sept. 2	....	300	00				

MINNEAPOLIS MILLING COMPANY

1919 Sept. 25	....	600	00	1919 Sept. 5	....	600	00

McHENRY MERCANTILE COMPANY

				1919 Sept. 14	....	200	00

NEW YORK WHOLESALE COMPANY

1919 Sept. 30	....	100	00	1919 Sept. 20	....	250	00

H. T. JONES, PROPRIETOR

				1919 Sept. 1	....	4,000	00

SALES

				1919			
				Sept. 8	....	10	50
				8	....	12	00
				8	....	18	00
				11	....	250	00
				16	....	13	00
				16	....	16	00
				16	....	20	00
				27	....	200	00
				28	....	14	00

PURCHASES

1919				
Sept. 3	....	3,000	00	
5	....	600	00	
14	....	200	00	
20	....	250	00	

SELLING EXPENSES

1919				
Sept. 4	....	25	00	

ADMINISTRATIVE EXPENSES

1919				
Sept. 30	....	42	00	

Instructions:

Copy the ledger of Jones on loose leaf ledger paper, placing four accounts on each page.

Take a trial balance of the ledger you have copied, showing only the debit or credit balance of each account.

LABORATORY EXERCISE NO. 15

On September 30, Jones has a merchandise inventory of $3,800.00. He estimates a yearly depreciation of 10 per cent on office furniture.

Make a balance sheet for Jones as of September 30 and a statement of profit and loss showing the result of the operations for September.

Preserve this exercise for future use.

LABORATORY EXERCISE NO. 16

Make a trial balance of the ledger of J. B. Moseley prepared in Exercise No. 13.

LABORATORY EXERCISE NO. 17

Make a trial balance of the ledger of G. T. Davies prepared in Exercise No. 12.

LABORATORY EXERCISE NO. 18

The inventory of Moseley on June 30 is $1,000.00. He estimates that the yearly depreciation on his fixed assets is 10 per cent.

Make a balance sheet for Moseley as at June 30, and a statement of profit and loss showing results of the operations for June.

Preserve this exercise for future use.

CHAPTER IX

THE ADJUSTING ENTRIES

Need of adjusting entries. A current record of the transactions which a business performs is made in the accounts. The making of this record involves, first, the analysis of the transactions to determine the debits and credits arising therefrom, and, second, the recording of these debits and credits in the appropriate accounts. The record made at the time the transaction is performed shows the effect of the transaction on the financial condition of the business. This effect on the financial condition is indicated by making certain changes in the items which will later appear on the accounting reports. For instance, if cash is paid for a service which is to be treated as an expense, the change in the financial condition of the business which is produced by this transaction is shown by subtracting the cash paid in the cash account and adding the service received in some expense account. So in the case of every transaction its effect on the financial condition of the business is reflected in the accounts.

There are, however, some changes in financial conditions which are not the direct result of a transaction or which cannot be recorded conveniently at the time they take place. To illustrate, at the beginning of the fiscal period there is certain merchandise on hand. Its amount, expressed in monetary units, is shown in a merchandise inventory account. During the year additional merchandise is purchased, and merchandise is sold. Consequently the amount of merchandise on hand at any time during the year will in all probability be different from the amount shown in the records. In most mercantile firms it is not practicable to show in the records the daily changes in the value of the inventory. The usual method is to wait until the end of the fiscal period and then determine by count the amount and value of merchandise on hand. The amount of the inventory as shown in the reports prepared at the end of the period must be that of the inventory taken at closing time. Therefore an entry must be made to correct the balance of the inventory account, show the amount of the new inventory, instead of the old inventory balance.

To take another simple illustration, the fixed assets of the business are decreasing in value constantly, due to their use in the business. This decrease in value, however, cannot be recorded in the accounts day by day as it takes place. At the end of the fiscal period, therefore, the amount of the depreciation on fixed assets must be estimated and entries made which will show the effect of such depreciation on the financial condition of the business.

The foregoing are samples of numerous changes in the financial condition of the business which take place during the fiscal period, but which cannot be conveniently recorded until the end of the fiscal period. The entries made at the end of the fiscal period to give effect to such changes are known as *adjusting* entries. Their purpose is to adjust the accounts so that these will reflect the true financial condition of the business and will agree with the accounting reports. In the present chapter such adjusting entries will be considered as would be used in a simple business like that of W. A. Williams.

Merchandise inventory. As previously stated, it is customary in mercantile firms to ascertain the amount of the merchandise inventory by taking an actual count of the goods on hand at the end of the fiscal period. These goods are then priced at the cost price, unless the market price is lower than cost, in which case conservative practice dictates that they should be evaluated at the lower price. The value of the inventory thus obtained is recorded in the account with merchandise inventory.

The purpose of the inventory account is, therefore, to show the amount of salable merchandise on hand at the end of the fiscal period valued at cost or market price, whichever is the lower.

The debits and credits to this account are as follows:

MERCHANDISE INVENTORY

Debit:	*Credit:*
At the end of each fiscal period with the amount of the inventory taken at the end of that period. The corresponding credit is to purchases or some other account showing the cost of the goods sold.	At the end of each fiscal period with the amount of the inventory at the beginning of that period. (This will be the amount of the debit balance in the account previous to the entry of the new inventory. The corresponding debit will be to the purchases account or some other account designed to show the cost of goods sold.)

The balance of the inventory account is always a debit balance, since it is an asset account and shows the amount of the inventory at the end of the last fiscal period for which reports were prepared.

Illustration of the inventory account and the adjustments. The nature of the entries necessary to make the adjustments required to show the inventory changes may be made clearer to the student by showing how they affect the accounts involved. Wayne Williams' inventory for December 31, 1918, is $2,500, and that is the debit balance which would appear in the account at the time the preliminary trial balance is taken on December 31, 1919. The account before any adjusting entry is made appears as follows:

MERCHANDISE INVENTORY

1919 Jan. 1	....	2,500	00				

It was seen that on the statement of profit and loss the inventory at the beginning of the period is added to the amount of the purchases for the period as part of the process of obtaining the cost of goods sold. In order to bring the ledger into accord with this statement, the amount of this old inventory will be added to the purchases as shown in the purchases account. This is accomplished by debiting the purchases account with the amount of the old inventory, and crediting the inventory account with that amount. This has the effect of subtracting from the inventory account the amount of the old balance, and of adding it to the amount of purchases, thus showing the total amount of goods which were available during the period and which could possibly have been sold. The two accounts affected by this entry will appear as follows:

MERCHANDISE INVENTORY

1919 Jan. 1	....	2,500	00	1919 Dec. 31	Purchases	2,500	00

PURCHASES

1919 Dec. 31	Balance	18,000	00		
31	Inventory	2,500	00		

By reference to the inventory account it will be seen that the debits and credits in that account are now equal. When this is true of any account, the account is said to be in *balance.* This may be indicated by totaling the two sides, writing both totals on the line where the total of the longer side falls, and drawing double lines beneath the two totals. These double lines signify that there is equality between the two sides to that point, and that all above the double lines may be ignored in the future. In this account there is only one item on each side, and the fact that the account is in balance may be indicated as follows:

INVENTORY

1919 Jan. 1	....	2,500	00	1919 Dec. 31	Purchases	2,500	00

In the statement of profit and loss it was seen that the amount of the inventory on hand at the end of the period was deducted from the sum of the inventory at the beginning and the purchases for the period, in order to arrive at the cost of the goods sold. This deduction can be shown in the ledger and the inventory account be made to show the amount of the newly ascertained inventory by an entry debiting the inventory account and crediting purchases account. Such an entry, as will appear from the illustration, has the double effect of deducting the amount from purchases and of setting up in the ledger the amount of the inventory now on hand. The following illustration shows how these accounts will then appear:

INVENTORY

1919 Jan. 1	....	2,500	00	1919 Dec. 31	Purchases	2,500	00
Dec. 31	....	3,500	00				

PURCHASES

1919 Dec. 31	Balance	18,000	00	1919 Dec. 31	Inventory	3,500	00
31	Inventory	2,500	00				

Office furniture and delivery equipment. The inventory account having been adjusted so as to be in harmony with the balance sheet, it is now necessary to adjust the accounts with the fixed assets so as to show the estimated depreciation as shown by the balance sheet. If it is estimated that the office furniture has depreciated in value to the amount of $50, this amount may be shown as a credit to a reserve for depreciation account, and as a debit to some expense account. Since the office furniture is used in the administration of the business, the depreciation arising therefrom may be considered as a charge or debit to administrative expense. Since the delivery equipment is used in connection with the delivery of merchandise, the depreciation on it may be treated as a delivery expense. Accordingly the estimated depreciation of $160 on delivery equipment will be debited to the delivery expense account.

After these entries have been made, the two reserve accounts and the administrative expense and delivery expense accounts will appear as follows:

ADMINISTRATIVE EXPENSE

1919							
Dec. 31	Balance	3,316	00				
31	Depreciation on equipment	50	00				

DELIVERY EXPENSE

1919							
Dec. 31	Balance	590	00				
31	Depreciation on delivery equipment	160	00				

RESERVE FOR DEPRECIATION OF OFFICE FURNITURE

				1919			
				Dec. 31	....	50	00

RESERVE FOR DEPRECIATION OF DELIVERY EQUIPMENT

				1919			
				Dec. 31	....	160	00

Methods of showing expenses in accounts. In the accounts shown in this chapter and the following chapter the expenses of the year are shown in total. The student will understand that numerous debits may be made to the accounts during the year. In the illustrations the total only is shown for the sake of simplicity.

QUESTIONS FOR CLASS DISCUSSION

1. Explain and illustrate the meaning and purpose of adjusting entries.
2. H. B. Jones purchases office furniture on January 1 for $400.00 which he estimates will be of service for ten years. What entries will be necessary in Jones's ledger at the end of the fiscal year December 31, 1918, in order to show the depreciation on office furniture?
3. On December 31 A. B. King has 500 units of merchandise on hand which cost 80 cents a unit, but which he can now purchase at 70 cents a unit. The retail selling price of the articles is 90 cents. At what price should this merchandise appear on the balance sheet of King?
4. On the statement of profit and loss of H. M. James the cost of goods sold is shown as follows:

COST OF GOODS SOLD

Inventory, January 1, 1919 .	$ 4,000.00	
Purchases	12,000.00	
Less:	$16,000.00	
Inventory, December 31, 1919	5,000.00	
Net cost of goods sold . . .		$11,000.00

What entries would be required to show the cost of goods sold in the ledger of H. M. James?

5. Explain and illustrate the use of the inventory account.
6. On January 1 A. M. Long purchases delivery equipment which costs $1,600.00. He estimates that it will be of service ten years and will have a scrap value of $200.000. What entries would be made in eonnection with delivery equipment on December 31?
7. The store building of the Chicago Mercantile Company has depreciated $500.00 during the year. What entries should be made to record this depreciation?
8. On the statement of profit and loss of the Brown Retail Store there appears the following item:

Depreciation $460.00

What does this probably include? What criticism would you offer of this method of showing depreciation?

9. At the end of the fiscal period you are instructed to make the adjusting entries for the records of the X.Y. Manufacturing Company. Explain how you would proceed and what information you would desire before making these entries.
10. Explain the difference between the adjusting entries required by a manufacturing firm and by a mercantile firm.

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chap. xvi.
MITCHELL, T. W., *Accounting Principles*, chap. x.
PATON, W. A., AND STEVENSON, R. A., *Principles of Accounting*, pp. 154–56.

LABORATORY EXERCISE NO. 19

The following is the trial balance of H. A. Smith:

H. A. SMITH

TRIAL BALANCE, DECEMBER 31, 1919

Cash	2,000	00		
Notes Receivable	300	00		
Accounts Receivable	3,700	00		
Merchandise Inventory, January 1, 1919	3,100	00		
Office Furniture	500	00		
Buildings	2,000	00		
Land	1,500	00		
Notes Payable			800	00
Accounts Payable			2,900	00
H. A. Smith, Proprietor			6,850	00
H. A. Smith, Personal	250	00		
Sales			40,000	00
Purchases	29,000	00		
Buying Expenses	1,000	00		
Selling Expenses	3,000	00		
Delivery Expenses	800	00		
Administrative Expenses	3,400	00		
	50,550	00	50,550	00

Assuming that Smith's inventory on December 31 is $4,500.00 and that the depreciation on office furniture is 10 per cent and on buildings 5 per cent, make a balance sheet and statement of profit and loss for Smith.

LABORATORY EXERCISE NO. 20

On loose leaf ledger paper open accounts to give effect to trial balance of Smith. Allow five lines for each account. Make the entries necessary to adjust the ledger accounts of Smith so they will agree with his balance sheet and statement of profit and loss.

Preserve this exercise for future use.

LABORATORY EXERCISE NO. 21

Make the entries necessary to adjust the ledger of J. B. Moseley as prepared in Exercise No. 13, so as to give effect to the adjustments stated in Exercise No. 18.

Preserve this exercise for future use.

LABORATORY EXERCISE NO. 22

Make the entries necessary to adjust the ledger of H. T. Jones as given in Exercise No. 14. The data for the adjustments are given in Exercise No. 15.

Preserve this exercise for future use.

CHAPTER X

THE CLOSING ENTRIES

Purpose of the closing entries. After the adjusting entries are made at the end of the fiscal period, the accounts, with the exception of the proprietorship accounts, furnish the information which should appear in the accounting reports. The next steps are: (1) to make the ledger show a summary of income and expense similar to that which will appear in the profit and loss statement; and (2) to bring the balances of the proprietorship accounts up to date, so that these balances will show the amount of proprietorship which should appear in the balance sheet. In order that these two things may be accomplished, certain accounts must be "closed." The entries necessary to affect this closing are known as "closing entries," and it is the purpose of the present chapter to explain how these entries are made.

Gross profit on sales. In making the ledger summary it is desirable to follow the order indicated by the statement of profit and loss. By reference to the statement of profit and loss it will be seen that the cost of goods sold is subtracted from the amount of the sales, to arrrive at the gross profit from sales. It appears there also that the cost of goods sold is obtained by adding to purchases the inventory at the beginning and subtracting from the sum thus obtained the inventory at the end of the period. In the adjusting entries discussed in the preceding chapter, the purchases account was so adjusted, by adding the initial inventory and subtracting the final inventory, as to make the balance of that account show the cost of the goods sold for the period. The next step, then, is to show the cost of goods sold as shown by the purchases account as a subtraction from sales, and this is accomplished by transferring the debit balance of the purchases account to the sales account. This transfer is effected by debiting the sales account and crediting the purchases account with the balance of the purchases account. When this entry has been made, the purchases and sales accounts will appear on page 110.

PURCHASES

1919 Dec. 31	Balance	18,000 00	|	1919 Dec. 31	Inventory	3,500 00
31	Inventory	2,500 00	|	31	Cost of goods sold	17,000 00
		20,500 00	|			20.500 00

SALES

1919 Dec. 31	Cost of goods sold	17,000 00	|	1919 Dec. 31	Balance	24,000 00
31	Gross profit on sales	7,000 00	|			
		24,000 00	|			24,000 00

It will be seen that crediting the purchases account for the amount of the cost of goods sold makes the debits and credits in that account equal in amount; in other words, it brings the account to a balance. This would be indicated by totaling the two sides of the account, writing the totals opposite one another, and drawing double lines under each of the totals, which indicates that the debits and credits in the account up to this point are equal. The purchases account is now said to be "closed" for the period, and no further entries will appear in it until the transactions of the next period begin to be recorded.

Profit and loss account. When the cost of goods sold has been transferred to the sales account, the balance of this account shows the gross profit on sales. By reference to the statement of profit and loss it will be seen that the next step in making a summary of the operations of the period is to subtract from the gross profit on sales the operating expenses, so as to determine the net operating profit. In order to show the net operating profit in the ledger it is customary to open an account termed the profit and loss account, to which the operating expenses are debited and the operating income credited.

The purpose of the profit and loss account is to offset the operating expenses of the period against the operating income with the resulting

balance, which shows the net operating profit. This account is sometimes termed a summary account because it is used to summarize the operations of the period. It is opened only at the end of the fiscal period and is closed as soon as the ledger summary is made. Entries during the fiscal period should not be entered in this account.

The debits and credits to be made to the profit and loss account are as follows:

PROFIT AND LOSS

Debit:	*Credit:*
With the amount of the balance of each account which shows an item of operating expense.	With the amount of the balance of each account which shows an item of operating income.

As indicated in the discussion of the statement of profit and loss, there may be non-operating expenses and non-operating income, and frequently both of these are shown in the profit and loss account. However, such items should be shown in a separate section of the profit and loss account, just as they are shown in a separate section of the statement of profit and loss. The recording and reporting of these items will be considered later. For the present, the profit and loss account may be considered as a summary of operating income and expense only.

The balance of the profit and loss account may appear on either side, depending on whether the total expense balances or the total income balances are in excess. A credit balance in this account shows the amount of the net operating profit for the period and is transferred to the credit side of the proprietor's account. A debit balance in this account shows a net loss for the period and is transferred to the debit side of the proprietor's account.

Net operating profit. In the previous discussion it appeared that the gross profit on sales as shown by the balance of the sales account is $7,000. This credit balance of the sales account will next be transferred to the profit and loss account by debiting sales for that amount and crediting Profit and Loss. After this is done, the balances of all the operating expense accounts will be transferred to the debit of the profit and loss account by crediting each expense account with the amount of its debit balance and debiting Profit and Loss for that

amount. When this has been done, the accounts with purchases and sales and with each item of operating expense will be balanced and may be ruled up as "closed." The profit and loss account will show a credit balance of $1,000, agreeing with the net income shown by the statement of profit and loss. This credit balance will then be transferred from the profit and loss account to the credit of the proprietor's account by debiting Profit and Loss for the amount and crediting the proprietor's account.

When all these closing entries have been made, the accounts affected by them, omitting the details of the entries made during the period just past, will be as follows:

PURCHASES

1919				1919			
Dec. 31	Balance	18,000	00	Dec. 31	Inventory	3,500	00
31	Inventory	2,500	00	31	Cost of goods sold	17,000	00
		20,500	00			20,500	00

SALES

1919				1919			
Dec. 31	Cost of goods sold	17,000	00	Dec. 31	Balance	24,000	00
31	Gross profit on sales	7,000	00				
		24,000	00			24,000	00

BUYING EXPENSES

1919				1919			
Dec. 31	Balance	444	00	Dec. 31	Profit and loss	444	00

SELLING EXPENSES

1919				1919			
Dec. 31	Balance	1,440	00	Dec. 31	Profit and loss	1,440	00

DELIVERY EXPENSES

1919				1919			
Dec. 31	Balance	590	00	Dec. 31	Profit and loss	750	00
31	Depreciation on delivery equipment	160	00				
		750	00			750	00

ADMINISTRATIVE EXPENSES

1919				1919			
Dec. 31	Balance	3,316	00	Dec. 31	Profit and loss	3,366	00
31	Depreciation on office furniture	50	00				
		3,366	00			3,366	00

PROFIT AND LOSS

1919				1919			
Dec. 31	Buying expense	444	00	Dec. 31	Gross profit on sales	7,000	00
31	Selling expense	1,440	00				
31	Delivery expense	750	00				
31	Administrative expense	3,366	00				
31	Net profit	1,000	00				
		7,000	00			7,000	00

W. A. WILLIAMS, PROPRIETOR

1919				1919			
Dec. 31	Net worth	7,630	00	Jan. 1	....	6,630	00
				Dec. 31	Profit and loss	1,000	00
		7,630	00			7,630	00
				Dec. 31	....	7,630	00

The ledger after closing. After the closing entries have been made, all of the expense and income accounts have been brought to a balance and "closed" or ruled off. They are now ready for the first

entries to be made in them to show the income and expense of the next period. The profit and loss account has been made to show a summary of income and expense in such a way as to give in the ledger the information used in preparing the statement of profit and loss and the results shown by the account are in harmony with the results presented in the statement. The accounts which still remain "open," that is, have balances, are the asset, liability, and proprietorship accounts. If a trial balance is taken at this time, the items appearing thereon will correspond with the items shown on the balance sheet.

Balancing and closing the accounts. The method of ruling up and closing an account when it is in balance has been explained. When an account is in balance and is closed, nothing appears below the double lines, and the accountant understands from a glance at the account that there is no balance to be considered.

Occasionally, however, it is desirable to rule up an account in such a way as to show the difference between the two sides. This is done by writing the *balance,* or the excess of one side over the other, on the side having the smaller amount, drawing the single lines under the two sides and totaling the two sides which must now be equal, since the difference has been added to the smaller side. The double lines are then drawn beneath the totals, indicating equality to that point, and the balance is entered below these double lines and on the side which is in excess by that amount. The equality between debits and credits is not disturbed by this process, since the same amount is added to each side of the account. When an account is ruled up in this manner, the accountant can see at a glance what the balance is. It is not customary in the case of most of the accounts to balance them and bring down the balance. The usual procedure in getting the balance is, as previously explained, to enter the total under each side in small pencil figures, and note the balance to that point, also in pencil, on the side which is in excess of the other. The cash account is usually the only one that is regularly balanced in the formal fashion described above. Assuming that an account with cash was carried in Wayne Williams' ledger, the totals being entered monthly, it might appear at the end of the year, after a balance had been taken, as follows:

CASH

1920				1920			
Jan. 1	Balance	1,800	00	Jan. 31	....	4,200	00
Jan. 31	....	4,000	00	Feb. 29	....	2,700	00
Feb. 29	....	3,200	00	Mar. 31	....	3,800	00
Mar. 31	....	3,400	00	April 30	....	4,000	00
April 30	....	4,000	00	May 31	....	2,500	00
May 31	....	3,800	00	June 30	....	3,300	00
June 30	....	3,100	00	July 31	....	3,000	00
July 31	....	2,900	00	Aug. 31	....	2,500	00
Aug. 31	....	3,000	00	Sept. 30	....	3,500	00
Sept. 30	....	3,100	00	Oct. 31	....	3,500	00
Oct. 31	....	3,700	00	Nov. 30	....	4,100	00
Nov. 30	....	4,100	00	Dec. 31	....	5,500	00
Dec. 31	....	4,000	00	Dec. 31	Balance	1,500	00
		44,100	00			44,100	00
1921	Balance	1,500	00				

The ruling of current accounts with persons and of note accounts. It was pointed out in the foregoing discussion that the cash account is usually the only one of the property accounts that is balanced under ordinary circumstances. The others are usually left open, since they furnish thus a better means of tracing through the account the history of the particular item involved.

Accounts with persons, particularly the accounts with customers, making up the item of accounts receivable, and those with creditors, composing the accounts payable group, offer a peculiar problem, as do also notes receivable and notes payable. Such accounts have so many items that they cannot be allowed to run on indefinitely, taking the complete total of the debits and credits up to date. Such a procedure would compel the bookkeeper, whenever he wished to ascertain the present balance of the account, to add all the debits and all the credits which had been made to that account. But in order to be able to obtain a clear analysis of the balance in such an account at a given time, it is not desirable to balance it formally, since it is a current account, and it should be kept so that its current balance at a given time can be readily analyzed. It is usual for a customer, when he does make a payment, to pay an amount which covers certain definite items with which his account has been previously debited, rather than simply to make "on account" a payment of an amount which does not correspond with any of the debits to his account. It is desirable,

therefore, that in keeping such an account, whether from the standpoint of the buyer or that of the seller, some attempt should be made to identify as nearly as possible the debit items with the particular credits which record the discharge of the indebtedness shown by these debits. This may be accomplished by lettering the items, which can be identified as thus offsetting one another. It will also usually be found true that all the debits up to a certain point are canceled by the credits up to a certain point, so that the balance of the account, whether debit or credit, is to be arrived at by a consideration of items below a certain line on each side of the account. This is true of accounts receivable, accounts payable, notes receivable, and notes payable.

The use of the devices discussed may be illustrated by an account with an individual customer.

H. E. WHITE

1920				1920			
Jan. 1	Balance	*a*	35 00	Jan. 16	....	*a*	50 00
Jan. 9	....	*a*	15 00				
				Feb. 2	....	*b*	45 00
Jan. 16	....	*b*	12 50				
Jan. 22	....	*b*	17 50	Mar. 3	....	*c*	28 00
Jan. 29	....	*b*	15 00				
Feb. 1	....	*c*	10 00				
Feb. 25	....	*c*	18 00				
Mar. 5	....		25 00				
Mar. 27	....		15 00				

This should be enough to indicate the method employed. The number of debit items canceled by one credit item will vary in different kinds of businesses according to the practice of the trade and according to the habit of the customer. In a wholesale business it is usual to receive a separate check from the customer to cover each invoice separately. In accounts with notes, there will usually be the same number of debits as there are offsetting credit items, since a note is usually canceled by a single payment. A practice sometimes followed in keeping note accounts is to enter each item, indicating the cancellation of a note on the line opposite the item which it cancels, regardless of chronological order. This is hardly necessary, however, if the device just illustrated is employed.

QUESTIONS FOR CLASS DISCUSSION

1. Explain and illustrate the meaning and purpose of "closing entries."
2. J. A. Bowen has made sales to the amount of $12,000.00 during the month. The cost of the goods sold is $9,000.00. Explain how the gross profit on sales would be shown in the ledger.
3. The expenses of Bowen for the month are as follows: buying expenses, $200.00; selling expenses, $600.00; delivery expenses, $300.00; administrative expenses, $900.00. What would be the net profit of Bowen and how would this be shown on his ledger?
4. Explain the purpose of the profit and loss account.
5. What is the relation between the profit and loss account and the statement of profit and loss?
6. What entries would be necessary to close the profit and loss account of J. A. Bowen?
7. The total of the debits to the sales account is $8,000.00 and the total of the credits to this account are the same. How is the equality of debits and credits shown?
8. The total of the debits to the cash account is $6,000.00 and the total of the credits is $4,000.00. What is the cash balance? How may this balance be shown in the account?
9. Explain how a personal account may be ruled.
10. The total of the debits to the cash account is $12,000.00 and the totals of the credits is $8,000.00. The ledger page on which the cash account appears is filled and it is necessary to transfer this account to a new page. Explain how this may be done.
11. Explain any other method than the one outlined in chapter x which might be used to close the ledger at the end of the fiscal period.
12. After the closing entries have been made, what accounts remain open in the ledger?

REFERENCES FOR FURTHER STUDY

Mitchell, T. W., *Accounting Principles*, chap. xiv.

Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xxx.

Paton, W. A., and Stevenson, R. A., *Principles of Accounting*, pp. 184–86.

LABORATORY EXERCISE NO. 23

Make the entries necessary to close the ledger of H. A. Smith as prepared in Exercise No. 20. Rule the accounts that balance.

LABORATORY EXERCISE NO. 24

Make the entries necessary to close the ledger of J. B. Moseley as prepared in Exercise No. 21. Rule the accounts that balance.

LABORATORY EXERCISE NO. 25

Make the entries necessary to close the ledger of H. T. Jones as prepared in Exercise No. 22. Rule the accounts that balance.

CHAPTER XI

THE SOURCE OF THE LEDGER ENTRIES

Need of a record other than the ledger. In the foregoing chapters it has been seen that the function of the accountant is primarily that of furnishing the business manager with such information about his business as will be of the greatest aid to him in planning further business operations. It has been explained that this information is presented in the form of reports, and that it should be classified and presented in such fashion as to make it not only intelligible but also applicable to the solution of the particular problems of the business manager for whose use it is prepared. Since there are typically several different parties interested in the business, each interested from a somewhat different point of view from the others, there will usually be need for several types of reports, each of which will present certain data about the business, classified on a basis which will make it most useful to the individual or group for whom the report is drawn up. Thus the vice-president in charge of finance might desire information concerning past sales, as well as the estimates of future sales, classified to show what amount of the sales were made for cash and what amount on credit, and might also wish to have the credit sales classified according to the terms of credit allowed. The merchandise manager, with the departmental buyers, might be interested in the classification of sales on the basis of the commodities sold, and the amount of each commodity sold during each month of the year, since it is the task of these functionaries to see that the stock is kept up to meet demands, and at the same time to avoid being caught with an excess of any type of goods.

The wide range of classification required in the reports means that there must be an equally wide range in the ledger, since the data for each item in the reports must be gathered into a separate account in the ledger. It has been previously explained how each transaction may be analyzed with regard to its effect upon the ledger accounts, and how this analysis is reflected in the accounts themselves.

Accounting experience has shown clearly, however, that it is not desirable to enter this information into the account directly, at the time that each transaction takes place. It is better to maintain some earlier form of record, in which may be entered the analysis of each transaction, showing each account to be debited and each one to be credited, together with the amount of each debit or credit and any other explanation which may seem desirable with regard to the nature of the transaction.

One reason why this method of procedure has been found desirable is that it would plainly be inconvenient and a waste of time to turn to each of the ledger accounts affected by each transaction and make the entries there at the time when the transaction occurs. It is better to enter the analysis of each transaction in its chronological order on a special record kept for that purpose, and to transfer these items to the appropriate ledger accounts at a time when this transfer may be made systematically and efficiently.

Another reason is that the account is employed merely as a means of classifying and summarizing information concerning certain items appearing on the reports, and is not designed to furnish any history or explanation of the particular transactions. It is desirable to keep a record of certain details with regard to each transaction, and this can be done best by the use of an additional record, such as is here under consideration. Also, the transactions as a whole are by this means entered in chronological order, thus supplying a continuous record of the transactions of the business over any given period of time.

Again, the debits and credits resulting from any transaction are entered in different accounts, and if an error should be made in entering one of them, the error would be very difficult to trace without the aid of an original record of the transaction as a whole. Thus if Wayne Williams sells Milton Jones goods to the amount of $100, Jones's account should be debited with that amount, and sales credited. If through an error sales is credited with $10 instead of $100, and the trial balance at the end of the period is found to be out of balance as a consequence, it will be much more difficult to locate the error if there is no book of original entry showing a complete record of the transaction with its debits and credits, which may be compared with the debits and credits in the ledger.

The books of original entry may also be used as a means of providing analyses of some of the more important classes of transactions, such analyses being more difficult to obtain in any other way. Such are the analyses of sales, purchases, cash receipts, and cash disbursements. The advantages which may be obtained in this way will be explained later.

The main reasons why it is desirable to employ so-called books of original entry to show the first analysis of the transactions, and as a medium for transferring the desired information into the accounts, may be summarized as follows: (1) The inconvenience and inefficiency of making the entries direct to the ledger. (2) The possibility of showing more detail regarding transactions when books of original entry are used. (3) Each transaction may be entered as a whole, and in its chronological order. This may be useful for purposes of reference. (4) It is easier to discover errors when the ledger items can be checked back to the books of original entry. (5) Books of original entry may be used to show valuable analysis which would be harder to obtain by direct entries to the ledger accounts.

The nature of books of original entry. Books of original entry may be of various types as regards their form, although all are alike in the fact that they are designed to show the analysis of the debits and credits arising out of each transaction recorded. The form of such books, as will appear later, depends primarily upon what accounts are to be carried in the ledger. As the student already knows, the accounts carried in the ledger are determined by the items of information which it is desired to have shown on the reports. This fact constitutes a valid reason for a consideration of the nature and use of the reports before taking up the matter of the books of original entry. The number and the types of reports required, and the items shown by them, vary with the nature of the business operations and the organization of the managerial force. There will be a resulting variation in the number of the accounts which must be kept to make possible these reports, and in the number and types of books of original entry which will be used to provide an analysis of the business transactions.

While the form of the books of original entry depends primarily on what accounts are carried in the ledger, it also varies secondarily according to the frequency with which certain types of transactions occur. Thus if a certain type of transaction, for example, the receipt

from customers of "trade acceptances," occurs frequently, some special provision for recording such transactions will be made. If it occurs infrequently, such special provision may not be necessary.

But no matter what forms of such records may be best under any given circumstances, the underlying principles governing their use are the same in every case. In the following chapter some of the special forms of books of original entry will be explained, with their uses and advantages, but the remainder of the present chapter will be devoted to a consideration of the general principles applicable to the use of the books of original entry, as exemplified by a simple type of such a record.

The journal. It is possible to record in a single book all the transactions which occur in the business. Such a book, in which every transaction would be entered in its chronological order, and analyzed as to its debits and credits, is known as the *journal.* While it is possible to use only this one book, modern practice employs a number of special records, each of which takes over some of the original functions of the journal, leaving comparatively few entries to be made in the latter. These special forms of record are sometimes called journals also, such as sales journal, notes journal, and the like, but they are generally referred to as *books* or *records*, each being distinguished according to the type of transaction to be recorded in it. Common examples are cash books, sales books, purchase books, and notes records. The original journal, from which all these forms have been developed, is used to record all transactions which find no place in any of the special records, and is known as the *general journal*, or, more commonly, simply as the *journal.*

It is nevertheless probable that the student can best arrive at an understanding of the nature and use of books of original entry by first studying the use of the general journal, since the other forms are simply subdivisions or modifications of the journal. After the use of this form has been made clear, the various modifications should offer little difficulty. The form of the journal may vary somewhat in practice, but the following may be taken as the standard form:

JOURNAL

(1)	(2)	(3)	(4)	(5)

The use of each of the five columns indicated on the standard form of journal page here illustrated may be described as follows:

1. Column (1) is known as the *folio* column, and is used to enter the number of the page in the ledger to which the item recorded on that line is transferred.

2. Column (2) may be called the *account* column. It is used to enter the names of the accounts which are to be debited and credited for the transaction which is being entered. The account to be debited is written first, beginning at the left-hand side of the column, and the account to be credited is written on the next line beneath, but slightly indented, so that it will be easy in looking down the journal page to distinguish the debits from the credits.

3. Column (3) is the *explanation* column, in which may be written any desired explanation with respect to the nature of the transaction whose debits and credits are being entered. Frequently the explanation is not confined to this column, but begins on the line beneath the name of the account to be credited, and extends across columns (2) and (3).

4. Column (4) is the *debit money* column. In this column, and opposite the name of the account to be debited, is written the amount of the debit.

5. Column (5) is the *credit money* column, and is used to show, on the same line with the name of the account to be credited, the amount of that credit.

It is customary to write the date of the first transaction which is entered in the journal at the top of the page above the double ruling, giving the month, day, and year. The date of each later transaction occurring in the same month is recorded by writing the number of the day of the month in the center of the line just beneath the record of the last preceding transaction. When the first transaction is entered in the new month, both the month and day will be given.

Illustration of the journal. A few simple illustrations of the use of the journal as a book of original entry is probably the best means of aiding the student to understand such use. For purposes of illustration it is not desirable to attempt to show a sufficient range or number of transactions to represent the typical business operations of even a very small business. Certain transactions will be shown, however,

chosen to illustrate some of the transactions which take place in a small clothing store.

Sept. 1. Paul Nelson invests $10,000.00 in cash in retail clothing business.

2. Purchases stock of goods from O. M. Sims for cash, $5,000.00.

3. Pays a month's rent of storeroom, in advance, $75.00.
Purchases furniture and fittings for storeroom for $350.00 cash.

4. Pays for advertising in local daily paper, $65.00.
Cash sales, $105.00.

5. Purchases goods from Cluett, Peabody & Co. on account, $750.00.
Purchases auto delivery wagon, $800.00 cash.

6. Sells goods on account as follows:
Charles Dwan, $15.00.
C. O. Seitz, $45.00.
Cash sales, $115.00.
Pays salaries of sales force, $50.00.

8. Purchases typewriter for cash, $85.00.
Purchases goods from Wilson Bros., $500.00 on account.

9. Receives $15.00 cash from Charles Dwan, in payment of his account.
Cash sales, $125.00.

10. Purchases office supplies (stamps, stationery, etc.), for cash, $50.00.
Sells for cash, $75.00; on account as follows:
J. S. Hanson, $55.00.
L. M. Sedgwick, $80.00.

11. Purchases from Adler Bros., $850.00 on account.

12. Receives $25.00 from C. O. Seitz on his account.

13. Pays Cluett, Peabody & Co., $750.00.

15. Pays salaries as follows: sales salaries, $50.00; bookkeeper-stenographer, $25.00; deliverymen, $20.00.

As stated above, any kind of transaction that can occur may be entered in the journal. Assuming for purposes of our illustration that all of these transactions are entered in the journal, they would appear as follows:

SEPTEMBER, 1919

		1		
		Cash	10,000 00	
		Paul Nelson, proprietor		10,000 00
		Paul Nelson invests $10,000 cash in the retail clothing business		
		2		
		Purchases	5,000 00	
		Cash		5,000 00
		Bought of O. M. Sims stock of men's furnishings for cash		
		3		
		Administrative Expense	75 00	
		Cash		75 00
		Paid rent of store for September		
		3		
		Store Equipment	350 00	
		Cash		350 00
		Purchased store furniture		
		4		
		Selling Expense	65 00	
		Cash		65 00
		Paid for September ads. in *Daily News*		
		4		
		Cash	105 00	
		Sales		105 00
		Cash sales to date		
		5		
		Purchases	750 00	
		Cluett, Peabody & Co.		750 00
		Purchased goods from Cluett, Peabody & Co.		
		5		
		Delivery Equipment	800 00	
		Cash		800 00
		Purchased delivery car for cash		
		6		
		Charles Dwan	15 00	
		Sales		15 00
		Sold merchandise to Charles Dwan on account		
		6		
		C. O. Seitz	45 00	
		Sales		45 00
		Sold to C. O. Seitz merchandise on account		
		6		
		Cash	115 00	
		Sales		115 00
		Sundry cash sales		
		6		
		Selling Expense	50 00	
		Cash		50 00
		Paid week's salaries to sales force		

SEPTEMBER, 1919

		8		
		Office Equipment	85.00	
		Cash		85.00
		Bought used typewriter		
		8		
		Purchases	500.00	
		Wilson Bros.		500.00
		Bought merchandise on account		
		9		
		Cash	15.00	
		Charles Dwan		15.00
		Received cash in payment of Charles Dwan's account		
		9		
		Cash	125.00	
		Sales		125.00
		Received for sundry cash sales		
		10		
		Administrative Expense	50.00	
		Cash		50.00
		Purchased stamps and other office supplies		
		10		
		Cash	75.00	
		Sales		75.00
		Sundry cash sales		
		10		
		J. S. Hanson	55.00	
		Sales		55.00
		Sold to J. S. Hanson on account		
		10		
		L. M. Sedgwick	80.00	
		Sales		80.00
		Sold L. M. Sedgwick on account		
		11		
		Purchases	850.00	
		Adler Bros.		850.00
		Purchased merchandise on account		
		12		
		Cash	25.00	
		C. O. Seitz		25.00
		Received from C. O. Seitz on account		
		13		
		Cluett, Peabody & Co.	750.00	
		Cash		750.00
		Paid their invoice of September 5		
		15		
		Selling Expense	50.00	
		Administrative Expense	25.00	
		Delivery Expense	20.00	
		Cash		95.00
		Paid salaries for the week		

Posting. The analysis of the transaction into its debits and credits, as recorded in the journal or other book of original entry, facilitates the transfer of the information into the accounts which are affected by the transaction in question. The process by which this information is transferred from the books of original entry to the accounts in the ledger is known as *posting.* The exact process of posting varies somewhat with the type of book of original entry. In the case of the journal it consists in the simple but laborious process of transferring each item appearing in the debit money column of the journal to the debit side of the account whose name appears opposite that item, and transferring each item appearing in the credit money column of the journal to the credit of the account thus indicated. A practice quite often followed is that of posting all the debit items to their proper accounts before beginning the credit postings. This is to be recommended as lessening the likelihood of posting an item to the wrong side of an account.

When any item is posted from a book of original entry into the ledger, the page in the book of original entry from which the item is taken is entered in the folio column of the ledger account, and the page in the ledger to which it is posted is entered in the folio column in the book of original entry. This practice is known as *paging,* and serves the double purpose of indicating that the item has been posted from the book of original entry, and of facilitating any desired comparison between the items entered in such record with the same items as entered in the ledger accounts.

There is no stated time at which posting must be done, so long as all posting is completed in time for the summary and reports to be made at the end of a period. It is desirable, however, to keep the posting as nearly up to date as is practicable. This is especially true in the case of personal accounts, and more particularly the accounts of customers. The reasons which make it desirable to keep the latter class of accounts up to date will be discussed in chapter xvii.

Illustration of posting. The journal entries given above for the purpose of illustrating the form of such a record may also be used to illustrate the posting of journal entries to the ledger. The ledger accounts which would be affected by the entries there shown are presented below as they would appear after the posting had been completed. In order to derive the most benefit from this illustration,

it is desirable that the student should trace each item from the journal to the ledger accounts.

CASH

Sept. 1	....	10,000	00	Sept. 2	....	5,000	00
4	....	105	00	3	....	75	00
6	....	115	00	3	....	350	00
9	....	15	00	4	....	65	00
9	....	125	00	5	....	800	00
10	....	75	00	6	....	50	00
12	....	25	00	8	....	85	00
				10	....	50	00
				13	....	750	00
				15	....	95	00

CHARLES DWAN

Sept. 6	....	15	00	Sept. 9	....	15	00

C. O. SEITZ

Sept. 6	....	45	00	Sept. 12	....	25	00

J. S. HANSON

Sept. 10	....	55	00				

L. M. SEDGWICK

Sept. 10	....	80	00				

STORE EQUIPMENT

Sept. 3	....	350	00				

DELIVERY EQUIPMENT

Sept. 5	....	800	00				

OFFICE EQUIPMENT

Sept. 8	....	85	00				

CLUETT, PEABODY & COMPANY

Sept. 13	....	750	00	Sept. 5	....	750	00

WILSON BROTHERS

			Sept. 8	....	500 00

ADLER BROTHERS

			Sept. 11	....	850 00

PAUL NELSON, PROPRIETOR

			Sept. 1	....	10,000 00

SALES

			Sept. 4	....	105 00
			6	....	15 00
			6	....	45 00
			6	....	115 00
			9	....	125 00
			10	....	75 00
			10	....	55 00
			10	....	80 00

PURCHASES

Sept. 2	....	5,000 00			
5	....	750 00			
8	....	500 00			
11	....	850 00			

SELLING EXPENSE

Sept. 4	....	65 00			
6	....	50 00			
15	....	50 00			

DELIVERY EXPENSE

Sept. 15	....	20 00			

ADMINISTRATIVE EXPENSE

Sept. 3	....	75	00				
10	....	50	00				
15	....	25	00				

Summary. The books of original entry are employed to record the analysis of transactions into their debits and credits. This record is made in such a way as to show the effect of the transactions on the various ledger accounts, and serves as a basis for transferring this information into the accounts. The journal form has been used to illustrate the principles involved in the use of books of original entry. Before a transaction can be entered in any book of original entry, it is necessary to go through a mental process of journalization, whereby the transaction is analyzed into its debits and credits. The journal form is used here for illustration because the form of entry in the journal sets forth this fundamental analysis more clearly than the form of entry in any of the other books of original entry. The aim of this chapter has been to establish a familiarity with principles rather than with practices. In subsequent chapters other typical forms of books of original entry will be illustrated and their use explained, and some attempt will be made to familiarize the student with current practice in the use of such records.

QUESTIONS FOR CLASS DISCUSSION

1. J. B. Ames, retail merchant, has followed the practice of recording his transactions directly in his ledger accounts. At the present time he has been unable to obtain a trial balance for several months and is unable to locate the error. Several customers claim that the monthly statements which he has sent them are incorrect and it has been quite difficult for him to locate the reason. He requests you to explain how his records may be kept so as to decrease the number of such errors and to make their detection easier. State what you would recommend to him and how you would show him the advantages of the method you recommend.
2. Upon your recommendation Mr. Ames has decided to use a journal in which to record his transactions before they go to the ledger accounts. He has never used a journal and is unfamiliar with its ruling and the purpose of the various columns of the standard journal page. State how you would explain the use of the standard journal page to him.

3. It is also necessary for you to explain to Mr. Ames how he may transfer the items recorded in the journal to the ledger accounts. Show by means of illustrations how you would explain this to him.
4. How often should you suggest to Mr. Ames that he post his journal?
5. Assuming that customers frequently ask for the amount they owe, what method may be followed so that their accounts will show the amount due at any time?
6. If a customer disputes the amount of some item shown in his account, how can the explanation with reference to this item be easily found?
7. Mr. Ames after posting his ledger is unable to obtain a trial balance. Explain how he may be able to find the error.
8. Explain the advantages of the use of original records of entry.
9. Would other records than the journal be desirable in accounting practice? Why? What would determine the nature of these additional records?

REFERENCES FOR FURTHER STUDY

Paton, W. A., and Stevenson, R. A., *Principles of Accounting*, pp. 56–61.
Klein, J. J., *Elements of Accounting*, pp. 7–12.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xvii.

LABORATORY EXERCISE NO. 26

On November 1, 1919, R. B. Baker made the following investment in the retail shoe business: cash, $5,000.00; a building valued at $7,500.00, on a lot valued at $2,500.00.

Nov. 3. He purchases from Hamilton Brown & Co. a bill of goods amounting to $750.00, terms net cash in thirty days.

4. Pays $450.00 for store equipment and fixtures, including their installation.

5. Buys for cash an office safe, $75.00, and a typewriter, $90.00.

6. Cash sales, $45.00.

7. Purchases merchandise from Stacy Adams & Co., $900.00, terms net cash in twenty days.

8. Sells merchandise to James Ryder on account, $18.00.
Cash sales, $58.00.
Pays salaries of sales clerks, $45.00.

10. Purchases from Smith Bros. $600.00 for his note at thirty days without interest.
Sells H. W. Griffith on account, $25.00.

11. Buys office desk for cash, $40.00.

12. Cash sales for the past three days were $140.00.

13. Sells J. C. Cummings $45.00 on account.

14. Buys stamps and stationery, \$50.00 cash.
    Pays \$20.00 to have a broken show window replaced.
15. Pays salaries for the week; sales salaries, \$60.00 and office salaries, \$25.00.
17. Cash sales for the past three days, \$325.00.
    Sells James Ryder on account, \$32.00.
18. Pays freight and cartage on goods received, \$18.00.
19. Cash sales, \$120.00.
    R. B. Baker withdraws for personal use, \$100.00.
20. James Ryder gave his note for sixty days, with interest at 6 per cent, for \$50.00, the amount of his account.
21. Pays for advertising in local paper, \$50.00.
    Cash sales, \$150.00.
22. Purchases merchandise from Goodyear Rubber Co., \$450.00, terms net cash in thirty days.
    Pays sales salaries, \$60.00, office salaries, \$25.00, delivery boy, \$18.00.
24. Pays Hamilton Brown & Co. the amount of their invoice, \$750.00.
    Cash sales, \$220.00.
25. Purchases a bicycle for the use of the delivery boy, \$40.00.
26. Receives \$45.00 from J. C. Cummings, in payment of his account.
29. Cash sales, \$300.00.
    Pays salaries, the same as on November 22.

Instructions:

Make journal entries for each of these transactions, including a brief explanation of each transaction. Use your own judgment with regard to the accounts which you will open.

Post these entries to the ledger accounts indicated by the journal entries. Place four accounts to the page, with the exception of the cash account, which should be placed on a separate page.

Take a trial balance.

CHAPTER XII

SOME SPECIAL FORMS OF THE JOURNAL

Need of special books of record—advantages of their use. In the preceding chapter the nature of the books of original entry was explained and some reasons for their use set forth. The journal was there illustrated and explained as the simplest form of such a record, and the one best adapted to aid the student in understanding the fundamental principles of "journalization." As was there indicated, it is possible to enter all the transactions of the business and get them into the appropriate ledger accounts by means of the journal alone. But accounting experience has shown that this would be too slow and laborious a method of recording the data concerning a modern business and that it is much more efficient to take certain classes of entries out of the general journal and enter them in special forms of books, each of which is designed for the entry of transactions falling within a certain limited class. This practice of segregating certain definite classes of transactions into special books of original entry, each of which may be considered as a subdivision of the general journal, has been carried so far in modern accounting practice that only very few types of entries, including a very limited number of individual items, are now made in the general journal. What these types of entries are which still remain to be handled in the journal will be discussed after some consideration has been given to the types of entries which are generally handled by means of special books or records.

In every business there are certain kinds of transactions which occur very frequently, for example, purchases, sales, cash receipts, and cash disbursements. If all transactions which fall under a certain class are entered together in a special book, designed for that purpose, considerable labor is saved in entering them and in posting them to the accounts. Furthermore, by the use of such a special book it is possible to obtain additional analysis of the data, which would not be so readily obtainable if only the general journal were used. The truth

of these statements may be best demonstrated by means of an illustration.

In any mercantile establishment, one kind of transaction which occurs quite frequently is the purchase of merchandise. The analysis of such a transaction shows that in every case there is a debit to be made to the purchases account, and a credit to some other account, typically to that of a trade creditor. If these purchase transactions are recorded in the general journal, it will be necessary in recording each individual transaction to indicate both the debit to purchases account and the credit to the other account affected. Assume that W. A. Williams makes the following purchases of groceries during the first week in September, 1919: on September 1, from Washburn-Crosby Company, $450; on September 2, from Chase & Sanborn, $300; on September 4, from the National Biscuit Company, $250; on September 5, from Wilson & Company, $300; and on September 6, from Armour & Company, $275. Omitting the explanations, the entries in the journal for these transactions would appear as follows:

SEPTEMBER, 1919

		1				
		Purchases	450	00		
		Washburn-Crosby Co.			450	00
		2				
		Purchases	300	00		
		Chase & Sanborn			300	00
		4				
		Purchases	250	00		
		National Biscuit Co.			250	00
		5				
		Purchases	300	00		
		Wilson & Co.			300	00
		6				
		Purchases	275	00		
		Armour & Co.			275	00

It will be apparent from the illustration appearing above that there must be five separate postings from the journal to the purchases account for the five transactions there shown. The same results may be obtained with less labor on the part of the bookkeeper if all the purchase transactions are kept out of the general journal and

recorded in a special book. The simplest form of such a record might appear as follows:

MERCHANDISE PURCHASES

1919 Sept.	1		Washburn-Crosby Co.		450	00
	2		Chase & Sanborn		300	00
	4		National Biscuit Co.		250	00
	5		Wilson & Co.		300	00
	6		Armour & Co.		275	00
			Purchases, Dr.		1,575	00

It will be seen that in this form of record, as is indicated by its heading, only one class of transactions is entered. Since nothing but merchandise purchases is entered here, there is of course no necessity of writing the name of the purchases account in recording each transaction, since every transaction is understood to involve a debit to purchases account and a credit to the account which is entered in the explanation column. Nor is there any need of entering the amount in more than one money column, since it is understood in each case that the amount debited to purchases is the same as that credited to the other account involved. In posting to the ledger accounts from such a record, the footing of the column would be posted to purchases account as a total, while the credits to the accounts of trade creditors would be posted in detail, just as they were from the journal. Whether the number of the items of this class thus entered were five or fifty, there would be for any one accounting period one posting of the total to the purchases account.

The foregoing illustration indicates the saving of labor resulting from the use of a separate journal or record in recording merchandise purchases, since the use of such a special record reduces by almost half the labor involved in the process of making the original entry, and in posting. The same saving is possible in the case of any other class of transactions which occur at all frequently in the conduct of the business. In the ordinary mercantile concern the kinds of transactions which are of most frequent occurrence are the ones mentioned in an earlier paragraph of this chapter: (1) merchandise purchases, (2) merchandise sales, (3) cash receipts, and (4) cash disbursements. In almost every mercantile business these four classes

of transactions, and usually some other classes as well, are not recorded in the general journal, but are entered on special forms of records. These records vary somewhat in their form with the nature of the business and according to the information which they are designed to show. In the present chapter the general nature and use of such books will be explained, employing as illustrations very simple forms of such records. These simple forms will illustrate the principles involved.

The purchases journal. It has already become apparent that the purpose of the purchases journal is to record the purchases made, showing in each case the account to be credited. This type of purchase record is variously termed "purchase book," "invoice book," "purchases record," "purchases register," and the like, but regardless of what it may be called, it is nothing more or less than a subdivision of the general journal, and is, like all forms of books of original entry, in the nature of a journal. Every entry made in it involves an equality between the amounts debited and the amounts credited. For the present, then, it will be referred to as the *purchases journal.* Also, for purposes of the present discussion, it will be considered as a record of purchases of merchandise only. Some businesses employ a form of purchase journal in which every kind of purchases is shown. Such a journal, however, is usually called by some special name, such as "vouchers payable register," "vouchers register," or "accounts payable register." No consideration will be given such books for the present.

It will be noted that in the foregoing illustration only purchases on account were shown. A question very naturally arises with regard to the treatment of purchases for cash. These might be handled either in the purchases journal or in the cash disbursements record or journal. But as will appear in the discussion of the cash records, no items affecting cash, whether receipts or disbursements, can be well left out of the cash record, and if cash purchases are to be shown in the purchases journal, some duplication of entries will be involved. Under some circumstances, as will be shown later, it may be desirable, for purposes of obtaining complete information in the purchases record, to show cash purchases in that book, but usually the cash purchases of merchandise are so infrequent that little is gained by recording them there, and they are therefore shown only in the cash

record and posted from that source. For the present, then, the purchases journal will be considered as a record of merchandise purchased on account.

The purchases journal illustrated. As has been intimated, there is no one correct form for the purchases journal. The form varies with the size and the organization of the business and with the nature and extent of the information desired by the owner concerning merchandise purchases. Assuming that no classification of purchases on a departmental, commodity, or other basis is desired by the owner, the information which should be generally considered desirable would be furnished by the form which follows:

PURCHASES JOURNAL

Date		L.F.	Name of Creditor	Address	Terms	Invoice Number	Amount	
1919								
Sept.	1		The Buda Co.	Chicago	2/10/n/30	85	400	00
	4		Barrett-Christie Co.	Chicago	2/10/n/60	86	550	00
	8		Simmons Hardware Co.	St. Louis, Mo.	n/30	87	200	00
	12		Gerlinger Bros.	Whiting, Ind.	2/10/n/30	88	250	00
	19		Electric Wheel Co.	Detroit, Mich.	2/10/n/30	89	450	00
	27		Simmons Hardware Co.	St. Louis, Mo.	2/10/n/30	90	340	00
	30		W. F. Hebard Co.	Chicago	2/10/n/30	91	225	00
	30		Total (Purchases, Dr.)				2,415	00

The columns shown in the foregoing illustration are, with their headings, for the most part self-explanatory. Three of them, however, may require a few words of explanation. The column headed "L.F." is used to record the page in the ledger of the account to which the credit for the purchase transaction is posted in each case, such account being the same as the name of the creditor written in the next column. The column headed "Terms" needs no explanation to those at all familiar with business practice. It is used to show the credit terms upon which the goods are purchased. Thus "2/10/n/30" means that the purchaser will be allowed to deduct 2 per cent from the price stated in the invoice if he pays it within ten days, and that in any case he is not supposed to delay paying for the goods for more than

thirty days. The column headed "Invoice Number" is to record the number of the "invoice" or statement of the shipment of goods, which shows the items shipped, their prices, the terms of payment, and other information. The handling of the invoice will be discussed in more detail later. The invoice number in connection with the entry of the transaction is useful in case any question arises later which makes desirable more information concerning the transaction, or which requires a verification of the information in the purchases journal. It is still the custom in some businesses to enter in the purchases book practically all the detail that is shown on the invoice for each transaction. This adds greatly to the size of the book and is a laborious process, besides being quite unnecessary. Modern practice depends on the invoices, which are filed in some logical order, to furnish any such details as are needed, the invoice number in the purchases book serving as a reference to the invoice in question.

Posting from the purchases journal. Posting from the purchases journal is simpler than the posting from the general journal. It consists in transferring the total of the "amount" column to the debit of purchases account, and in transferring the amount of each of the items to the credit of the account named in the column headed "Name of Creditor." It is generally desirable to keep the accounts with creditors posted up to date, so that information concerning their claims may be readily obtained at any time. For this reason such accounts should be posted daily. This posting is often made directly from the purchase invoice, after the latter has been used as a basis for entering the transaction in the purchases journal and stamped to indicate that such entry has been made. The routine of handling the purchase and sales invoices and using them as posting media will be discussed at length in the chapters on business vouchers and forms (see chapter xiv), and in the chapters on purchases and sales (see chapter xvii). The posting of the total of the "amount" column to the purchases account can only be made when that column is totaled, and this is usually done only at the time when a trial balance is to be taken, which is generally at the close of each month. The illustration of the purchases journal shown above indicates the method of ruling the purchases journal after such a posting has been made. The number of the ledger page of each creditor's account, or some other

form of check on the posting, would appear in the folio column opposite the name of the account, and the page number of the purchases account would appear opposite the last item, "Purchases, Dr."

The sales journal. The sales journal is a special form of record whose purpose is to provide a record of the transactions involving sales of merchandise by the business. It may be used to record all sales of merchandise, whether for cash, on open account, or for notes. On the other hand, it is often used to record only sales on account. In a wholesale business, where the sales are relatively few in number and large in amount, it is quite practicable to record all sales in the sales journal, treating them all as credit sales, even though actually made for cash, and in the case of cash sales to debit cash and credit the customer by means of an entry in the cash journal made at the same time. In a retail business, where there are a large number of cash sales, often for small amounts, such a procedure is not practicable, and here the cash sales are ordinarily entered in the cash journal and posted to the sales account from that record, while only sales on account are entered in the sales journal. On account of the large number of individual sales in a retail establishment, both cash and credit sales would usually be entered in total at the end of the day, the totals being obtained by listing and adding the amounts of the sales tickets, and the posting to the customers' accounts in the case of credit sales would in this case be made direct from the sales tickets.

To make sure that the student understands the first method of procedure described above, an illustration will be given. Suppose that the National Biscuit Company sells W. A. Williams, a retail merchant, merchandise to the value of $400, for which he pays cash. According to the method outlined above, the entries made by the wholesale concern to record this transaction, if put in journal form, would appear as follows:

W. A. Williams	$400.00	
Sales		$400.00
Cash	400.00	
W. A. Williams		$400.00

If the student will picture in his mind the effect of these entries on the accounts, it will be clear that the customer's account is in no way changed by the entry except to increase the total of each side,

and that the net effect of the entry is a debit to cash and a credit to sales. But since these entries are not actually made in the journal, but in two separate books, and usually by two different persons, it is really more convenient to have them recorded in this manner than it would be to try to combine the record of the transaction into one entry.

The sales record, like the purchases record, is known by a number of different titles, being variously called "sales record," "sales book," "sales register," etc. The name is immaterial so long as the nature of the record is understood. It will be known here as the sales journal, since that is the name which seems best to indicate its real nature.

Illustration of sales journal. It was stated on page 120 that the form of the purchases journal would vary considerably in different business establishments according to the amount of analysis and detailed information desired by the managers concerning the purchases. There are more possible bases which may seem desirable for analyzing sales than there are in the case of purchases. The form of the sales journal may therefore vary still more widely than that of the purchases journal. The matter of sales analysis by means of the sales journal must be left for consideration in a later chapter. Omitting that for the present, a simple form of sales journal which would furnish the essential information might appear as follows:

SALES JOURNAL

Date		L.F.	Name of Customer	Address	Terms	Invoice Number	Amount	
1920								
Jan.	1		D. F. Anderson	624 Ninth Ave., S.E.		1	45	00
	3		H. Schroeder	1525 University Ave.		2	27	50
	5		Paul Carroll	2408 Fourth St., S.E.		3	18	00
	7		P. Hathaway	945 Oak St.		4	22	50
	10		F. K. Enke	1214 Fourth St., S.E.		5	28	00
	15		Oliver Eames	2546 University Ave.		6	35	00
	19		R. B. McCall	468 Sanborn Ave.		7	24	50
	25		J. H. Gray	1278 Riverside Blvd.		8	47	50
	30		P. Hathaway	945 Oak St.		9	25	40
	31		Sales, credit				273	40

In view of the explanations already given of the use of the columns in the journal and the purchase journal, it is not necessary to explain

the use of the foregoing columns. The ledger folio column will be used, of course, when the debits to customers are posted to their accounts. It will be noted that the column headed "Terms" is left blank in this illustration. The reason is that the business involved is assumed to be a retail business, and in such a business all goods are usually sold either for cash or on "monthly account," the balance of each customer's account being payable at the end of each month. This being the case, a statement of terms of sale is superfluous. This column would be used in the case of a manufacturing or wholesale mercantile concern, since such concerns sell goods which are to be paid for within a definite number of days after the date of the invoice, usually with the privilege of deducting a discount for payment within a stated shorter time.

Posting from the sales journal. The method of posting from the sales journal is similar to that described on page 137 for the purchases journal. The total of the "Amount" column is posted to the credit of the sales account. Each of the items in that column is posted to the debit of the customer whose name appears in the column headed "Name of Customer." The total of the sales will be posted to the sales account only at the time when a trial balance is to be taken, but the debits to the customers' accounts should be posted daily. This is especially true in a manufacturing or wholesale business where customers may wish to extend their credit to a considerable amount. In passing on the granting of credit to a customer, the particular manager who is responsible for credit and collections will require all the data which are available with regard to that customer, and this will, of course, include the standing of his account at that date. Also, whether or not accounts are posted daily, they must be posted in time to prepare the periodical statements of account which are sent out by many wholesale houses and by practically all retail houses to their customers.

The cash journals. In most businesses the transactions involving cash are of the most frequent occurrence. Such transactions are really of two kinds: (1) those involving the receipt of cash and (2) those involving the disbursement of cash. There is ordinarily found in use, therefore, a special form of journal for each of these types of transactions. Each of these records is, of course, a complete and separate journal, but the two are generally both included in keeping a complete record of cash, this record being known as the "cash book."

All through this book the two forms are bound together, so that on the left-hand page is shown the record of the receipts of cash, and on the right-hand side the record of the cash disbursements. Since every transaction involving the receipt of cash means a debit to the cash account and every one involving a disbursement means a credit to that account, this arrangement of the cash book is in accord with the practice observed elsewhere of recording debits on the left side of the account and in the left-hand money column of the journal. These two forms of record, then, while each a complete journal in itself, constitute the two sides of the cash book, the left-hand page, showing the receipts, being known as the debit side, and the right-hand page, showing disbursements, being known as the credit side.

Form of the cash book. Like the sales journal, purchases journal, and other special forms of books of original entry, the cash book may be used to show a considerable amount of detail in analyzing the transactions involved. The extent to which such detail will be shown will depend on the reporting requirements of the management. For the present it is best to illustrate the principles involved in the use of such a record by a very simple form of cash book, such as might be suitable for a small mercantile business with a limited range of transactions and simple reporting requirements. Such a form might be ruled as follows:

CASH RECEIPTS

Date		L.F.	Account Credited	Explanation	Amount	Total Cash, Dr.
Jan.	1		George Dailey, Cap.	Investment	7,500 00	
	2		Sales	Cash sales	85 00	
	5		H. Schroeder	In full of account	27 50	
	9		Sales	Cash sales	122 50	
	15		D. F. Anderson	In full of account	45 00	
	21		Notes receivable	D. Gray's note 11/22	200 00	
	21		Interest on notes receivable	D. Gray's note 11/22	2 00	
	27		Sales	Cash sales	145 00	
	30		R. B. McCall	In full of account	24 50	
	31		Cash, Dr.			8,151 50
						8,151 50
Feb.	1		Balance on hand			6,584 00

CASH DISBURSEMENTS

Date		L.F.	Account Debited	Explanation	Amount		Total Cash, Cr.	
Jan.	1		Prepaid insurance	Paid insurance for yr.	72	00		
	3		Rent	Rent of store for Jan.	90	00		
	6		Sales salaries	Pay-roll for week	75	00		
	6		Office salaries	Pay-roll for week	25	00		
	10		Purchases	Buda Co. for cash	125	50		
	13		Sales salaries	Pay-roll for week	75	00		
	18		Simmons Co.	Invoice 1/8	200	00		
	24		Office equipment	Typewriter and desk	125	00		
	28		Electric Wheel Co.	Invoice 1/19	450	00		
	30		Office supplies	Stationery & printing	80	00		
	30		Advertising	Ad. in *Daily News*	25	00		
	31		Office salaries	Salaries to date	75	00		
	31		Sales salaries	Salaries to date	150	00		
	31		Cash, Cr.				1,567	50
	31		Balance on hand				6,584	00
							8,151	50

Nature of the cash book. Although the two sides of the cash book are practically always shown bound together so that they fall on alternate and opposite pages, and must both be taken together in order to have a complete record of cash, it is well for the student to remember that they are in reality two complete journals. That is to say, each of these two forms provides for a complete record of the transaction to be recorded, with an equality between the debits and the credits for each such entry. This equality between debits and credits may not be apparent from a glance at either of the cash journals, but it becomes apparent when the posting is considered. Thus, if H. Schroeder pays $27.50, the amount of his account with the business, the journalization of the entry as it would appear in the general journal is as follows:

Cash	$27.50	
H. Schroeder		$27.50

Here, of course, the equality of debit and credit is quite apparent. But when this transaction is recorded in the cash receipts journal, or debit side of the cash book, the amount will only be entered once, according to the illustration given above. The reason for this is that the total of all items entered on this record is understood to be a debit to cash, and this total will be posted as a single item at the end

of the accounting period, so that there will be an equality between the debits and credits posted to the ledger from this journal, since the total amount debited to cash is the sum of all the individual items credited to other accounts.

It is easy to see that the same is true of the other side of the cash book, on which the disbursements are recorded. Here each entry involves a credit to cash and an equal debit to some other account or accounts. The debits will be posted separately, item by item, while the credit to cash will be obtained from the footing of the "amount" column. The total of the items debited to other accounts must be equal to the amount of the credit to cash, since this is also the total of the items entered in the "amount" column.

Both the record of cash receipts and the record of cash disbursements, then, like the purchases journal and the sales journal, are special forms of the journal, each dealing with a particular kind of transaction. Every entry made in either of them is complete in its analysis of the transaction into debits and credits, and the principles involved in the use of these forms are in no way different from those governing the use of the general journal.

Posting the cash book. The posting of the cash book should be sufficiently indicated by the foregoing discussion, taken in connection with the instructions for the posting of the purchases book and sales book. On the debit side the individual items appearing in the "amount" column are to be posted to the credit of the accounts indicated in the column headed "account credited," while the total of the "amount" column goes to the debit of the account with cash. On the credit side the items are posted to the debit of the different accounts indicated, and the total to the credit of cash.

Summary. The discussion in the present chapter has as its object the explanation of the general principles involved in the use of special journals. For this reason it is not considered desirable to risk confusing the student by introducing at this point any but the very simplest forms of such books. As a matter of fact, such simple forms as the ones here presented are usually found only in very small or simply organized businesses. Most of the records are much more elaborate, in order better to serve the purposes of labor saving and analysis of information. Illustrations of such forms, with a discussion of the principles governing their design, will be presented in chapters

xix and xx. For the present the student should secure a clear understanding of the connection between the books of original entry and the reporting requirements of the business. That connection may be briefly stated as follows: In any given business there are certain items of information which it is desirable to have presented in periodical reports. In order to have these items of information available when needed, it is well to keep a continuous record of the changes taking place in each of these items in the form of an *account* with such an item. The number of such accounts required by the business, and the nature of the information to be shown in these accounts, will determine the number and form of the books of original entry designed to show the analysis of the business transactions according to their effect upon the various accounts. If the student can clearly see this relation as applied to the simple forms of records so far used for illustrations, he should have little difficulty in understanding, using, and designing the more complicated forms which will be considered in later chapters.

QUESTIONS FOR CLASS DISCUSSION

1. The X. Y. Mercantile Company makes numerous purchases of farm products, both on account and for cash. What method would you recommend for recording these purchases? Would you record the purchases on account and cash purchases in the same book? Why, or why not?
2. The bookkeeper for the X. Y. Company says that the purchases of produce on account have always been entered in the general journal, and wishes to continue the practice. Explain just why it would be to his interest to use a different method.
3. Most of the farmers who sell produce to the X. Y. Mercantile Company later purchase merchandise from the company to an amount not greatly different from the amount of the produce sales. What record would be made when the sales take place?
4. The X. Y. Mercantile Company decides to issue "due bills" to those from whom they purchase produce. These "due bills" will be returned later in payment of merchandise. Explain the accounting procedure involved in establishing this practice.
5. Describe the procedure followed in posting from the purchases journal. By what other names is this book sometimes called?
6. Can the form of sales journal illustrated in chapter xii be used to record cash sales? Explain.
7. A form of sales record formerly used was a large book, into which the sales invoices were pasted. This is now obsolete. Why should this be so? Is less information concerning sales required now than formerly?

8. Describe the procedure followed in posting from the sales journal.
9. Is the "cash book" one or two journals? Describe its posting.
10. Jones & Wilson give the Citizens State Bank their note for $1,000.00 at sixty days, without interest. The bank discounts the note at 6 per cent, and credits their account with $990.00. How could this transaction be recorded in the form of cash book which has been described?
11. Explain what is necessary in order that customers' accounts may show at any time the amount which they owe.
12. Mention as many special journals as you can which might be used by different businesses, and explain the purpose of each.

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chaps. xviii–xxi.
KLEIN, J. J., *Elements of Accounting*, pp. 12–15.
MITCHELL, T. W., *Accounting Principles*, chap. v.
PATON, W. A., AND STEVENSON, R. A., *Principles of Accounting*, pp. 77–93.

LABORATORY EXERCISE NO. 27

The following are the purchases of H. F. Ford during the month of May:

May 2. Bought of King Mercantile Co., terms n/10, merchandise, $480.50.
3. Bought of Hodge & Lyon, terms n/10, merchandise, $370.40.
4. Bought from O. P. Read, terms n/30, merchandise, $1,640.40.
18. Bought of King Mercantile Co., terms n/30, merchandise, $950.60.
25. Bought of Hodge & Lyon, terms n/30, merchandise, $450.80.
26. Bought of Lane Shoe Co., terms n/30, merchandise, $750.40.
30. Bought of J. C. Adams, terms n/60, merchandise, $340.60.
31. Bought of O. P. Read, terms n/30, merchandise, $480.20.

Instructions:

Rule a sheet of paper to represent a purchases journal and enter the foregoing transactions.

Preserve this exercise for future use.

LABORATORY EXERCISE NO. 28

The following are the sales of H. F. Ford during the month of May:

May 1. Sold J. O. Murdock, 215 Main St., merchandise, $13.00.
4. Sold L. L. Koelsch, 5714 Blackstone Ave., merchandise, $16.50.
9. Sold M. J. Torr, 4674 University Ave., merchandise, $34.00.
12. Sold N. W. Barnes, 5742 Dorchester Ave., merchandise, $8.00.
15. Sold W. E. Atkins, 6048 Woodlawn Ave., merchandise, $22.00.
18. Sold C. O. Hardy, 6140 University Ave., merchandise, $19.00.
21. Sold J. C. Christ, 5842 Woodlawn Ave., merchandise, $28.00.
26. Sold A. M. Rogers, 4872 Main St., merchandise, $16.00.
30. Sold J. D. Holmes, 6175 King St., merchandise, $26.00.

Instructions:

Rule a sheet of paper to represent a sales journal and enter the foregoing transactions.

Preserve this exercise for future use.

LABORATORY EXERCISE NO. 29

The following are the cash transactions of H. F. Ford during the month of May:

May 1. H. F. Ford invests $2,600.00 cash in the retail merchandise business.
2. Bought of A. M. Hall for cash, stock of merchandise, invoiced at $1,740.60.
3. Paid rent for the month, $50.00.
Received from cash sales, $80.40.
5. Paid clerk hire, $18.00.
6. Received $13.00 from J. O. Murdock in full of account.
8. Paid King Mercantile Co. $480.50 in full of account.
9. Received $280.40 for cash sales.
12. Paid clerk hire, $20.00.
13. Paid $28.00 for expenses of buying trip.
16. Purchased delivery equipment for cash, $210.00.
17. Paid Hodge & Lyon $370.40 in full of account.
17. Received $16.50 from L. L. Koelsch in full of account.
18. Paid $12.20 for stamps and stationery.
19. Paid clerk hire, $21.00.
22. Received from M. J. Torr $34.00 in full of account.
24. Received from C. O. Hardy $19.00 in full of account.
26. Received $640.20 for cash sales.
Paid salary of delivery clerk, $18.00.
27. H. F. Ford withdrew for personal use, $25.00.
29. Received from N. W. Barnes $8.00 in full of account.
31. Received $420.80 for cash sales.
Paid miscellaneous administrative expenses, $42.00.

Instructions:

Using a double sheet of journal paper as a cash book, enter the foregoing transactions.

LABORATORY EXERCISE NO. 30

Exercises Nos. 27, 28, and 29 together constitute the purchase, sales, and cash transactions of H. F. Ford for the month of May. Post the records prepared in the three exercises, placing four accounts to the page.

Take a trial balance.

CHAPTER XIII

THE USE OF THE GENERAL JOURNAL

Effect of special journals on the general journal. In discussing the books of original entry in chapter x the general journal was explained and illustrated as a posting medium for transactions of all kinds. It was stated at that time, however, that this journal was not so employed in modern practice. It was used in chapter x merely to illustrate in a simple way the nature and function of books of original entry and the method of recording transactions in them. In chapter xii, special journals for record ingtransactions with purchases, sales, and cash were discussed and illustrated. These journals were discussed because they are the ones in general use, although many other special journals are found in use in various businesses, and because they are typical of all special journals.

By the use of these journals three principal classes of transactions are taken out of the general journal and entered in these separate records. An analysis of the transactions of a mercantile business will show that most of its transactions involve the purchase or sale of merchandise or the receipt or payment of cash. Since this is true, it is interesting to inquire what transactions are left to be recorded in the journal, which, as previously stated, is used to record all transactions not placed in any special journal. For the sake of discussion the entries recorded in the journal may be classified as follows: (1) opening entries; (2) current entries; (3) adjusting entries; (4) closing entries. In order that the present use of the journal as a posting medium may be better understood, each of these will be discussed in turn.

Opening entries. Opening entries are those which are made to record the financial condition of the business at the time of its beginning or organization. The financial condition of a business is shown by its assets and liabilities and the difference between the two, which is its net worth. The opening entry or entries must record these so that they will, when posted, be properly shown in the accounts. In

the case of a sole proprietor, his investment may consist entirely of cash, in which case the opening entry may be made through the cash book by a debit to cash and a credit to the proprietor's account.

In many cases the proprietor has other property, such as land, buildings, and merchandise which he desires to invest in the business, in which case a journal entry must be made, since these items cannot be recorded in the special journals.

For purposes of illustration it may be assumed that on June 1, 1918, J. R. Bell started in business by investing the following assets: cash, $1,000; merchandise, $2,000; building, $4,000; land, $1,000. By adding these items it will be seen that the total assets of Bell are $8,000, and since he has no liabilities this amount represents his proprietorship or net worth. Bell's books may be opened by the following journal entry:

		Cash		1,000 00	
		Merchandise Inventory		2,000 00	
		Building		4,000 00	
		Land		1,000 00	
		J. R. Bell, proprietor			8,000 00

Although the posting of this entry will show Bell's financial condition in the accounts, all cash must be recorded in the cash book, consequently the cash item will be recorded on the debit side of the cash book as well as in the journal. It is readily apparent that this item cannot be posted from both the journal and the cash book, for if it is it would show a cash investment of $2,000 instead of $1,000. To avoid this, the individual item is not posted from either book. It is included in the total of $8,000 which is posted from the journal to the credit of Bell's account and it will be included in the cash total posted from the cash book to the debit of the cash account. Another method of treating this item is not to enter it in the journal, but only in the cash book, and to post it from there. The advantage of entering it in the journal is that the total investment is shown in one place. Both methods give the same result so far as the effect on the accounts and the reports is concerned.

In some cases the proprietor has liabilities at the inception of the business which he desires the business to assume. In this case these

liabilities must be shown as part of the journal entry. If Bell owes $1,000 on account to creditors, his opening entry would be:

		Cash		1,000	00		
		Merchandise Inventory		2,000	00		
		Building		4,000	00		
		Land		1,000	00		
		Accounts payable				1,000	00
		J. R. Bell, proprietor				7,000	00

The cash item will be treated in this case in the same manner as explained above.

The example just given illustrates the nature of the opening entries for a single proprietor. The same principles are followed in the case of a partnership or of a corporation, but the entries may be somewhat more complicated. The method of making such entries will be explained and illustrated in subsequent chapters.

Current entries. As previously stated, the general journal is used to record all transactions which cannot wisely be recorded in any of the special journals. It is impossible to discuss all such transactions which may arise during the fiscal period in connection with different businesses, but a few which occur most frequently will be considered.

In the discussion of the purchases and sales journals it has been explained that these records are used only to record purchases and sales of merchandise. In every business certain property other than salable merchandise must be purchased from time to time to use in the conduct of the business. Then, too, discarded property, or property no longer needed in the conduct of the business, may be sold. If these purchases and sales are for cash they may be recorded in the cash book, but if they are on account the only means of recording them is in the journal. For instance, if $600 of office equipment is purchased on account from the Brown Furniture Company the asset account with office equipment should be debited and the account of the Brown Furniture Company should be credited. This is accomplished by the following journal entry:

Office Equipment $600.00
Brown Furniture Company $600.00

In case of a sale of property on account, the reverse entry is made in the journal, the account of the customer being debited and the

property account being credited. As explained in the discussion of the fixed assets accounts, the latter transaction may also involve an entry to the reserve for depreciation account (see chapter vi).

It has been explained in chapter xii that when goods are sold on account a record of the transaction is made in the sales journal, and that when cash is received in payment a record of the cash received is made on the debit side of the cash book. However, written promises or notes are sometimes received in payment of merchandise sold, the note being given at the time of the sale or later in payment of the oral promise previously given. In either case, it is customary to record the sale of the merchandise as an account sale in the sales journal and record the receipt of the note in payment separately in the journal. If the student will follow through a transaction of this kind he will readily see the effect of this procedure. If James King purchases $200 of merchandise on account, there would be an entry or entries in the sales journal by which King's account would be debited and the sales account credited for $200. If he sends his thirty-day note at the end of the month in payment of the account, an entry would be made in the journal as follows:

Notes Receivable	$200.00	
James King		$200.00

The effect of this entry is to cancel the charge made to the account of James King at the time of the sale, and to show the claim of the business against James King in the form of a written claim as reflected in the notes receivable account, instead of showing it as an oral claim.

When notes are used by the business in payment of merchandise bought, a similar procedure is followed. The purchase is recorded in the purchases journal as a debit to the purchases account and a credit to the account of the creditor. When the note is issued in payment, whether immediately or at some future time, a journal entry is made debiting the creditor's account and crediting the notes payable account. This changes the form of the obligation of the business to the creditor from an oral to a written promise. Occasionally errors are made in recording transactions, and these errors result in incorrect amounts being debited and credited to the accounts, or in debits and credits being made to wrong accounts. These errors may be discovered later in the fiscal period and frequently the

easiest method of correcting them is by means of a new journal entry. For instance, there may have been an expenditure of $200 which should have been charged to administrative expense, but the bookkeeper carelessly recorded it as a debit to selling expense and posted it accordingly. The owner in looking over the trial balance notices that the selling expense for the month is larger than usual and very naturally seeks the cause. He may notice that the administrative expense is smaller than for the previous month and this may suggest to him that an error has been made. In any case the bookkeeper, in seeking an explanation of the variation of the selling expenses, will take the items in the selling expense account and trace them through the paging given in the folio column back to the book of original entry whence they came. By looking at the explanations recorded in the books of original entry he will seek to find any item which has been improperly charged. If by this means he located the entry by which the $200 is improperly charged to selling expenses, he must by some means correct the error. As they stand, the administrative expenses are $200 too small and the selling expenses are $200 too large. The easiest method of correcting the error is to make a journal entry as follows:

Administrative Expenses . . .	$200.00	
Selling Expenses		$200.00
To correct error made by charging through the cash book on June 16 $200 to selling expenses which should have been charged to administrative expenses.		

In the case of a correcting entry such as the above, a very complete explanation must be given so that the reason for the entry can be readily determined if the matter again arises.

Correcting entries of various kinds will also be required during the fiscal period in a business which performs numerous and varied transactions. The correcting entry just shown serves only as an illustration of one type, but from it the student should be able to understand the nature of such entries. In the laboratory exercises given at the end of the various chapters he will find illustrations of other correcting entries.

Although it is impossible to give an inclusive discussion of the transactions which may be recorded in the general journal during the course of the fiscal period, the following list gives the more common ones. These entries may be included under the heading of "current entries," since they are all made from time to time during the period, rather than at its end.

1. Purchases on account of services and of property other than merchandise.

2. Sales on account of property other than merchandise.

3. Receipt of property other than cash in payment of obligations due the business.

4. Issuance of property other than cash in payment of obligations owned by the business.

5. Corrections of entries which have been incorrectly recorded or which have been wholly or in part canceled.

Adjusting entries. In the discussion of the periodic summary of the ledger (chapter ix) it was explained that at the end of the fiscal period certain entries are necessary in order to adjust some of the accounts so that they will reflect correctly the financial condition of the business. These entries as explained in the previous discussion are known as adjusting entries. The student should not confuse these entries with those discussed under the head of correcting entries in the preceding paragraph. Correcting entries are made during the fiscal period to correct an erroneous entry or to record the partial or complete cancellation of a transaction. Adjusting entries are made at the end of the fiscal period to adjust the value of accounts which reflected accurately the financial condition of the business at the beginning of the period or at the time of their construction, but which have changed in value since that time.

In chapter ix it was explained that, in connection with the accounts of W.A. Williams, the following adjustments were necessary: The inventory account must be adjusted so as to show the disposition of the beginning inventory of $2,500 and the possession of an ending inventory of $3,500; and this was accomplished by a debit to the purchases account and a credit to the inventory account for the old inventory and a debit to the inventory account and a credit to the purchases account for the new inventory; there was an estimated depreciation of $50 on office furniture and of $200 on the building, and this depreciation must be recorded by a debit to administrative

expense and a credit to a reserve for depreciation of office furniture and to a reserve for depreciation of building.

The entries of these adjustments were made (see pages 109, 112, 113) directly in the accounts, since the purpose of the discussion at that time was to show the effect of business operations on the ledger accounts. Books of original entry had not been introduced. In subsequent chapters, however, the use of books of original entry was explained. The advantage of having all transactions recorded in some book of original entry prior to their entry in the accounts has been seen. To secure this advantage, adjusting and closing entries should be recorded in the journal, and from there posted to their respective accounts. The chief advantage of this method is that all entries in the ledger can be traced back to their original source and an explanation therefor obtained. It also minimizes error and greatly facilitates the finding of any errors which may occur.

The adjusting entries required in connection with the accounts of W. A. Williams given in chapter ix in journal form will be as follows:

		31		
		Purchases	2,500 00	
		Inventory		2,500 00
		To transfer the inventory of January 1, 1918, to purchases		
		31		
		Inventory	3,500 00	
		Purchases		3,500 00
		To record the inventory of December 31, 1918		
		31		
		Administrative expenses	50 00	
		Reserve for depreciation of office furniture		50 00
		To record the estimated depreciation on office furniture		
		31		
		Administrative expenses	200 00	
		Reserve for depreciation of building		200 00
		To record the estimated depreciation on building		

When these entries are posted, the accounts will show the same results as they do in the illustrations given in chapter ix.

The closing entries. In chapter ix it was explained that there are certain entries necessary at the end of the fiscal period in order to summarize the results of the period and make the income and expense accounts on the ledger correspond to the summary shown on the

statement of profit and loss. In that chapter it was also explained that the closing of the imaginary ledger of W. A. Williams would involve the following: the transfer of the balance of the purchases account to the debit of the sales account; the transfer of the balance of the sales account to the credit of the profit and loss account; the transfer of the balances of the selling expense and administrative expense, buying expense, and delivery expense accounts to the debit of the profit and loss account; and the transfer of the balance of the profit and loss account to the credit of the proprietor's account.

For the same reasons given in the case of adjusting entries, the closing entries should be recorded in the journal and posted from there to the ledger accounts. The journal entries for closing the ledger of W. A. Williams are as follows:

	31				
	Sales	24,000	00		
	Purchases			24,000	00
	To transfer cost of goods sold to the sales account				
	31				
	Sales	7,000	00		
	Profit and Loss			7,000	00
	To transfer gross profit on sales to the profit and loss account				
	31				
	Profit and Loss	444	00		
	Buying Expenses			444	00
	To transfer buying expenses to the profit and loss account				
	31				
	Profit and Loss	1,440	00		
	Selling Expenses			1,440	00
	To transfer selling expenses to profit and loss account				
	31				
	Profit and Loss	750	00		
	Delivery Expenses			750	00
	To transfer delivery expenses to profit and loss account				
	31				
	Profit and Loss	3,366	00		
	Administrative Expenses			3,366	00
	To transfer administrative expenses to profit and loss account				
	31				
	Profit and Loss	1,000	00		
	W. A. Williams			1,000	00
	To transfer net profit for the fiscal period to the proprietor's account				

When the entries on page 154 are posted, the accounts will show the same results that they do in chapter ix, where the entries are made directly in the accounts.

QUESTIONS FOR CLASS DISCUSSION

1. A. M. Jones has been recording all the transactions of his business in a journal. His business has increased until he thinks it desirable to use a purchases journal, a sales journal, and a cash book. He is in doubt whether he should retain the general journal and, if so, what entries should be made in it. What advice should you give him? Why?
2. J. A. Hoffer opens a retail store on January 1, 1920, when his assets and liabilities are as follows:

Cash	$ 500.00
Merchandise inventory	2,200.00
Office furniture	300.00
Building	2,000.00
Land	1,000.00
Notes payable	1,500.00
Accounts payable	500.00

   Explain the opening entry necessary to record Hoffer's investment.
3. Mr. Hoffer purchases on account delivery equipment to the value of $300.00. Explain the entries necessary to record this transaction.
4. Later, Mr. Hoffer has old delivery equipment for which he originally paid $200.00. He sells this for $25.00. State what entries should be made at the time of sale.
5. Mr. Hoffer gives the King Mercantile Company a note for $300.00 to apply on account. Explain how this transaction would be recorded.
6. The bookkeeper of the X. Y. Company has charged $100.00 to delivery expenses that should have been charged to administrative expenses. Explain how this error should be corrected.
7. On January 1, 1917, A. R. King has an inventory of $3,000.00. On December 31, 1917, he has an inventory of $4,000.00. Explain the entries necessary to show the disposition of the old inventory and the possession of the new inventory. State where these entries would be made.
8. On December 31, 1917, King desires to show a summary of his year's operations on his ledger. On his ledger he maintains the following income and expense accounts:

   Purchases account
   Sales account
   Selling expense account

Buying expense account
Delivery expense account
Administrative expense account
Profit and loss account
Proprietor's account

Briefly explain how a summary of his ledger would be made. Where would the necessary entries be made in his record? What are such entries called?

9. A. R. King has these entries recorded in his journal:

		Jan. 1		
		Cash	500.00	
		Merchandise Inventory	2,000.00	
		Building	3,000.00	
		Land	1,500.00	
		Notes Payable		1,000.00
		Accounts Payable		1,500.00
		A. R. King, Proprietor		4,500.00
		Jan. 5		
		Office Equipment	300.00	
		Chicago Furniture Co.		300.00
		Jan. 10		
		Notes Receivable	80.00	
		William James		80.00
		Jan. 16		
		James Randolph	100.00	
		Office Furniture		100.00
		Dec. 1		
		H. R. Johnson	150.00	
		Notes Payable		150.00
		Dec. 15		
		Selling Expenses	46.00	
		Administrative Expenses		46.00
		Dec. 31		
		Selling Expenses	85.00	
		Reserve for Bad Debts		85.00
		Dec. 31		
		Sales	3,000.00	
		Purchases		3,000.00
		Dec. 31		
		Profit and Loss	1,200.00	
		Administrative Expenses		1,200.00

Explain the purpose of each of the entries above and state whether it would be termed an opening, correcting, adjusting, or closing entry.

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chap. xxii.

LABORATORY EXERCISE NO. 31

Record the following transactions, using the sales book, purchases book, cash book, and journal. Illustrations of these are given in chapters xi and xii.

March 1. R. E. Taylor invests $10,000.00 in the wholesale business at 200 South State St.

2. Rents store and warehouse for one year at a monthly rental of $150.00, giving his check for that amount.
   Purchases from A. R. Miller on thirty-day account, merchandise, $400.00.
3. Paid Blattner Bros. for office furniture, $225.00.
4. Purchases of Ralph McCoy on twenty-day account, merchandise, $350.00.
5. Purchases from A. P. Copeland, thirty-day account, merchandise, $40.00.
6. Sells A. K. Davies, ninety-day account, merchandise, $92.50.
7. Purchases of A. R. Miller, thirty-day account, merchandise, $250.00.
8. Pays for postage and stationery, $7.80.
9. Pays Harry James, bookkeeper, $15.00, and David Swanson, salesclerk, $12.00.
10. Purchases as follows:
    F. M. Jones, ten-day account, merchandise, $180.00.
    A. P. Copeland, twenty-day account, merchandise, $150.00.
    Carl Hamlet, ten-day account, merchandise, $120.00.
11. Sells as follows:
    A. L. Anderson, ten-day account, merchandise, $250.00.
    M. M. McGee, twenty-day account, merchandise, $300.00.
12. R. E. Taylor withdraws for personal use, $60.00.
13. Buys of J. H. Holliday and Company for cash, office furniture, $110.00.
14. Buys of H. H. Smith Typewriter Company for cash, one typewriter, $100.00.
15. Sells as follows:
    E. R. Mears, cash, $75.00.
    L. O. Lay, thirty-day account, merchandise, $280.00.
16. Pays clerk hire as follows:
    Harry James, $15.00.
    David Swanson, $12.00.
    Received of A. K. Davies payment of invoice of March 6, $92.50.

17. Sells as follows:
    G. B. Crawford, merchandise, \$975.00.
    E. B. Case, merchandise, \$275.00.
18. Purchases as follows:
    Ralph McCoy, n/20, merchandise, \$650.00.
    F. M. Jones, n/20, merchandise, \$340.00.
    W. T. Dickens, n/10, merchandise, \$700.00.
19. R. E. Taylor has sent to his home for private use merchandise to the value of \$15.00.

NOTE.—This exercise is continued at the end of the next chapter.

CHAPTER XIV

BUSINESS VOUCHERS AND FORMS

Purpose of the voucher.—The student now has an understanding of the nature and purpose of the accounting reports. The use of the ledger accounts in classifying the information needed for making such reports has also been explained, as well as the use of the books of original entry as a convenient means of analyzing each business transaction, and as a basis for posting to the ledger accounts.

It is scarcely to be thought, however, that a correct record can be kept in the books of original entry of all the transactions that take place in the business without some sort of written memoranda of such transactions being transmitted to the bookkeeper. Without such memoranda he cannot possibly know all the happenings of the business which affect the accounts. This is well illustrated by the case of a large department store, whose sales clerks are making hundreds of sales each day, while its buyers are purchasing goods and letting contracts for the different departments in the various source markets. Clearly enough, in any modern business establishment larger than a small one-room shop, there must be some regular provision for notifying the accounting department of each transaction that takes place in the business. Even if the person who performs the transaction is also the one who enters it in the books, some memorandum should be made of it, since otherwise the details may be forgotten before the record can be made. It will be found, therefore, that almost every business concern uses certain forms for making a notation of the essentials of each business transaction at the time it is performed. Such forms are known as *vouchers*. A voucher, in this use of the word, may be defined as the written evidence of a business transaction.

It will be found that there are vouchers which serve not only as a basis for recording the transactions out of which they rise but also as a means of facilitating these transactions. Indeed, some of the vouchers which will be discussed in the following pages are not used as

a basis for making entries, but only for the facilitation of the operation. These will be discussed along with the others, but it is in the use of the voucher as the primary evidence of the transaction that we are at present primarily interested.

Classification of vouchers and forms. Owing to the variations in systems of accounting used by different businesses, there is even a greater number of kinds of vouchers than of books of original entry. It is evident that all these forms cannot be considered here. Not even an inclusive classification will be made at this point. A simple classification which will serve well enough for purposes of the present discussion is as follows: (1) vouchers used in connection with the purchase and sale of merchandise; (2) negotiable vouchers; (3) miscellaneous vouchers and forms not included in either of the first two classes.

The merchandise invoice. When a sale of goods is made, it is customary for the seller to make out a statement of essential facts, a copy of which he sends to the buyer. Such a statement is known to both buyer and seller as an *invoice.* To the buyer it is a *purchases invoice*, while to the seller it is a *sales invoice.* It is an itemized statement from the seller to the buyer of the goods sold, together with the prices and the total amount of the sale. Other items of information ordinarily shown are the name and address of both buyer and seller, the date of sale, the terms of sale, the method of shipment or delivery, and the serial number of the sales invoice. Any other desired information, such as the number of the salesman making the sale, and the department from which the goods is sold, may also be shown. The method employed in making use of the invoice for purposes of the purchase or sales record will be discussed briefly below.

When goods are purchased by a business concern, the invoice for the goods usually arrives before the goods themselves. If so, it is placed in a temporary file until the arrival of the goods. As soon as the latter are received, they are checked with the invoice to see that they correspond to the goods listed on the invoice in quantity, kind, and price, and the extensions and total are verified. If everything is found to be correct and in order, the invoice is then used as the basis for an entry in the purchases journal, as described in a previous chapter. Each purchases invoice when received is given its serial number in the purchaser's records, and this number is entered in the

appropriate column in the purchases journal. After being entered, the invoice is filed. If it represents a credit purchase, it is filed in a "tickler file" of unpaid invoices, under the date upon which it should be paid. When it has been paid and the payment recorded properly in the cash book, it is placed in a permanent file, according to some appropriate system of filing. It is there available for future reference in case need should arise.

The routines followed in handling the sales invoice, or the "sales ticket," as it is usually termed in retail establishments, are by no means identical. In a wholesale business, one or more copies of the invoice are generally retained by the selling organization. One of these is sent to the accounting department, where it serves as a basis of entering the transaction in the sales journal. When remittance is received from the customer, the check may pass through the accounting department, thus serving as a basis for the entry in the cash book to show the payment of the invoice, or a special form may be used to notify this department of the payment. Sometimes a copy of the invoice itself, stamped "Paid" is sent to the accounting department for this purpose. The entry in all of these cases is the same. A copy of the invoice may also be kept in the files of the credit department until it is paid. After payment, this or some other copy is filed in a permanent file, where it may be located by means of its serial number in case any reference to it is desired.

In a retail business the cash sales are generally of much greater importance, relatively, than they are in a wholesale business. The duplicate sales tickets for the cash sales in each department are totaled at the end of the day's business, these totals being checked against the total of cash received from that source, and then entered in the proper records as totals. The credit sales are sometimes entered item by item in the sales journal and the posting to the customers' accounts done from that record, but in the larger retail concerns it is usual for them to be entered by totals, and for the posting to the customers' accounts to be made directly from the sales tickets. In some retail stores no posting is done to the accounts with customers. Instead, the credit sales are entered by totals, and the duplicate sales tickets filed under the name of the customer. When a remittance is received from the customer, the proper entry is made in the cash book, and the tickets covered by the remittances are

either sent to the customer or destroyed. The amount owed to the business by a customer at any time is shown by the total of the tickets filed under his name. These tickets serve as the basis of the monthly statement of account to be sent to the customer, if it is the practice of the business to send out such statements.

Form of the merchandise invoice. The form of the invoices used by different businesses varies considerably in detail, as suggested in the foregoing discussion. The following form, however, may be considered typical of the sales invoices sent by wholesale businesses to their customers.

MARSHALL-WELLS HARDWARE COMPANY
615 Marquette Ave., MINNEAPOLIS, MINN.
WHOLESALE HARDWARE

Telephone:
Central 450

*Sold to*______________________________

____

Order No.

Terms: Sixty Days. If paid within ten days from date, 2 per cent may be deducted.
Other terms and conditions shown on reverse side.

In referring to this invoice, please give date and number. If any of these goods are unsatisfactory, complaint should be made within five days of their receipt. They are not returnable without our permission.

On page 163 is shown a form of the sales ticket which is given to the customer by a large retail establishment. It may be considered typical of the sales tickets used in retail businesses.

Negotiable instruments. In earlier chapters it was pointed out that business consists of a series of operations, each of which involves

Order No. or Buyer	Date 19____

Customer's Memorandum

Salesperson's No._______	Delivered by Floorman	

CHARGE______________________________

This memorandum should be kept to check monthly bill, except when merchandise is returned, when it should be sent back with goods, in order that the proper credit be made.

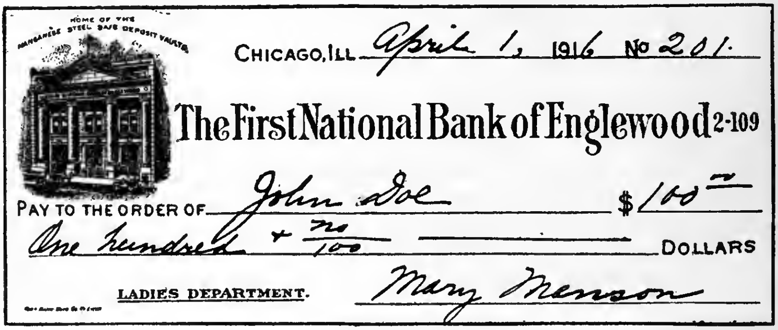
Merchandise to be credited on current bill must be returned before the last day of the month.

THE CHICAGO STORE
CHICAGO

207 25

an exchange of values. Such exchanges of values are assisted greatly by the use of *negotiable instruments*. It has been explained that customers often paid for merchandise by means of *checks*. This means that the customer has in some manner established a credit to his account at a bank, and that he writes an order to the bank to pay a certain amount to the order of his creditor, the acceptance of this order by the creditor serving to discharge the obligation. The method by which credit may be established at the bank will be discussed in chapter xv. For the present it is sufficient to point out that the usual method by which "cash" payments are made between businesses is by the delivery to the creditor of a check drawn by the debtor against some bank with which he has a balance. The creditor will then ordinarily "indorse" the check, in a manner to be explained

later, and send it to his own bank to be credited to his account there. When he does this he is said to *deposit* it. The bank with which the check is deposited then secures settlement on the check from the bank upon which it is drawn. This may be done by sending it directly to the other bank; by sending it to the *clearing house*, the organization through which banks adjust their claims against each other; or by sending it to another bank which will secure payment on it. A form of check which shows the essentials of such an instrument is given below



CHICAGO, ILL. April 1, 1916 No 201

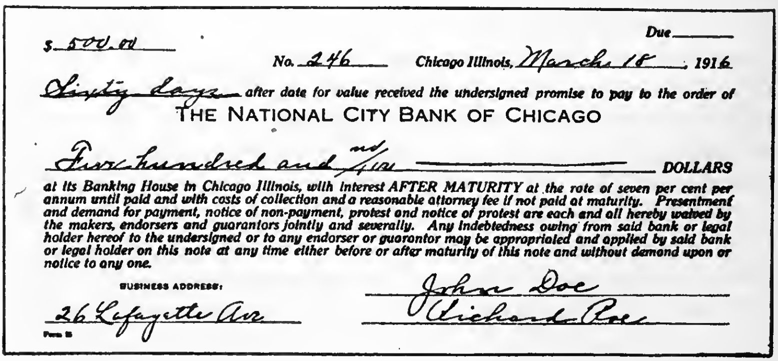
The First National Bank of Englewood 2-109

PAY TO THE ORDER OF John Doe $100 00

One hundred + no/100 DOLLARS

LADIES DEPARTMENT. Mary Menson

Another possible method of payment is that of giving the creditor a *note*, which, as already explained, is the debtor's written promise to pay the specified sum at a certain future date. Such a note received from a customer is a *note receivable* to the business to whom it is payable, and a *note payable* to the business making the promise to pay. The essentials of such an instrument, and the form which it ordinarily takes, are indicated by the following illustration:



Due ______

$ 500.00

No. 246 Chicago Illinois, March 18 1916

Sixty days after date for value received the undersigned promise to pay to the order of
THE NATIONAL CITY BANK OF CHICAGO

Five hundred and no/100 DOLLARS

at its Banking House in Chicago Illinois, with interest AFTER MATURITY at the rate of seven per cent per annum until paid and with costs of collection and a reasonable attorney fee if not paid at maturity. Presentment and demand for payment, notice of non-payment, protest and notice of protest are each and all hereby waived by the makers, endorsers and guarantors jointly and severally. Any indebtedness owing from said bank or legal holder hereof to the undersigned or to any endorser or guarantor may be appropriated and applied by said bank or legal holder on this note at any time either before or after maturity of this note and without demand upon or notice to any one.

BUSINESS ADDRESS:

26 Lafayette Ave

John Doe

Richard Roe

In the foregoing discussion of the use of the note, it was referred to as settling the obligation. But it is readily seen that it does this only in the sense that one form of obligation is settled by creating a different form. When the time for which the note is drawn has elapsed, payment must be made on the note itself. This is usually done by means of a check. If goods are purchased on open account, payment may be made by check, or a note may be given to discharge the obligation on open account, and the note paid at maturity by check, thus involving both forms discussed above. A firm unable to meet its open accounts at the time when they are due will sometimes secure an extension by giving a note for the amount, payable at a later time. This does not represent a desirable situation.

The processes described above are the same, whether looked at from the point of view of the selling concern or from that of the one doing the purchasing. They will, of course, be recorded differently on the books of the two. The note and check are used not only in the purchase of merchandise but also in payment for other assets, current and fixed, and for services. In the purchase of fixed assets, such as land and buildings, notes may be given which have a more distant maturity. Sometimes they run for several years. Such notes are usually secured by a mortgage on the property. The nature of such long-time liabilities and their treatment in the accounts will be considered in a later chapter. The point of the present discussion is that the note may be used in facilitating practically any sort of transaction.

It should be apparent that notes, checks, and instruments of similar legal import have a very important part to play in business transactions. Since this is true, the accountant, dealing with them almost continually, should have some idea of their nature and of their peculiar legal aspects, so that he may record properly the transactions involving their use. This class of business papers, serving as they do to facilitate exchange, are known as *negotiable instruments*, and their importance has led to the attaching of certain definite legal consequences to their use.

Requisites of negotiable instruments. The important part played by negotiable instruments in business has made it desirable that there should be some very definite formulation of the rules for their form and use, which should apply generally, and not vary from state to state.

This need has led to the adoption in a number of states, of the Uniform Negotiable Instruments Law, the purpose of which is to formulate the generally accepted usages and rulings with regard to negotiable instruments, and to make such law apply uniformly in the various states. This law states certain requisites of a negotiable instrument, and these are summarized below.

1. The instrument must be in writing and signed by the maker or drawer.

2. It must contain an unconditional promise to pay a fixed sum of money.

3. It must be payable on demand or at a time which is either fixed or determinable.

4. It must be payable to bearer or to order.

Kinds of negotiable instruments. There is no particular specified form which must be followed in order to give any particular instrument these requisites. Any written instrument which possesses the essentials will be held by a court to be a negotiable instrument. The forms employed, however, have become more or less standardized through general usage, and the standard form should be used without any considerable variation, in order to avoid any possible difficulty. There are several kinds of negotiable instruments, each having a somewhat different use, and each having its peculiar form. The principal kinds may be listed as follows: (1) notes; (2) checks; (3) drafts; (4) cashier's checks; (5) express money orders; (6) postal money orders.

The draft. An example of one form of draft, the bank check, has already been given. A draft is a written order from one party to another, directing this second party to pay a certain sum of money to a specified third party. The bank check is, of course, such an order. Owing to the special nature of the check, and the special manner of its use, it was not discussed under the general head of drafts but was considered by itself. Drafts other than checks may be classified as (1) bank drafts and (2) commercial drafts.

A *bank draft* is to all intents and purposes a check drawn by one bank on another. The bank drawing such a draft generally has funds on deposit with the bank against which it draws, or else some understanding by which it is permitted to draw in advance of its making such deposit. Bank drafts are used for making payments at some

considerable distance by mail. The bank draft will circulate more freely away from home than will the personal check, and the draft does not usually cost the recipient anything for collection, while the check may. Thus if Mr. Fred Dole, of Chicago, has to make a payment to a firm in Philadelphia, he may go to his bank in Chicago and ask for a New York draft in favor of the Philadelphia concern. He asks for a New York draft, since New York is our financial center, and banks in all parts of the country have connections with New York banks. Mr. Dole will draw a check payable to his Chicago bank for the amount of the draft he is asking for, possibly including a small charge for the service. He will mail the draft to the Philadelphia concern, who will probably deposit it at their Philadelphia bank. The latter bank will usually send it to their correspondent bank in New York for credit, and this bank, if not the one upon which the draft is drawn, will usually send it to the bank upon which it is drawn for collection. The form of such a draft may be as follows:

THE CORN EXCHANGE BANK
CHICAGO, ILL., May 15, 1920
PAY TO THE ORDER OF________________ $800.00
Eight Hundred........and........no/100..............Dollars
TO THE NATIONAL CITY BANK — J. S. HARVEY
NEW YORK, N.Y. — Cashier

The *commercial draft* is a draft drawn by one private individual or business concern upon another, directing the second party to pay a certain sum of money to a third party named. Such a draft would have the following form:

$200 — DANVILLE, ILL., May 3, 1920
At sight pay to the order of WILLIAM JOHNSON
Two Hundred........and........no/100...............Dollars
Value received and charge to the account of
TO CLANAHAN & SON — GRANT BROTHERS
SPRINGFIELD, ILL.

This is the form of draft, or "bill of exchange," that was used to some extent in the past, before our present credit and banking system was

developed. The theory of such a draft was that Clanahan and Son, of Springfield, were indebted to Grant Brothers, of Danville, and the latter owed William Johnson, of Springfield. Grant Brothers, by giving Johnson a draft against Clanahan and Son, could reduce their indebtedness by that amount without sending any money, and Clanahan and Son, by accepting and paying the draft, could reduce their indebtedness to Grant Brothers without sending money to Danville. With the modern system of banking, such a procedure has become archaic, and is of interest only from a historian's point of view. Such indebtedness would today be settled very easily by mailing a personal check or a bank draft. The chief reason why such a "three-cornered" draft is impracticable is that it would be only by the rarest coincidence that the amount which Clanahan and Son owed Grant Brothers would correspond with the amount that the latter owed Johnson.

A form of commercial draft which is at present in use is one by which one party draws upon a second party, making the draft payable to the party drawing it. The nature of such a draft can be better understood by seeing the form of it, which is as follows:

$250 CHICAGO, ILLINOIS, May 20, 1920
At sight pay to the order of
OURSELVES
Two Hundred Fifty and no/100..........................Dollars
Value received, and charge the same to the account of
To A. P. JENS, WEST AND DENNETT
CHAMPAIGN, ILL.

Such a draft as this is ordinarily used for the purpose of speeding up collections. The typical case represented by this draft would be that Jens owes West and Dennett, and that they draw on him in an effort to collect the amount of the debt. The draft would ordinarily be given to West and Dennett's bank for collection. The bank, in turn, would forward it to some bank in Champaign, which would notify Jens of the draft. If he pays it, the Champaign bank would either remit to the Chicago bank or credit the account of the Chicago bank for the amount, and West and Dennett's account would be credited by the Chicago bank, that firm being notified of the collection.

The same result might have been obtained by making the draft payable to the Chicago bank instead of to West and Dennett, the form of the draft remaining otherwise the same. The procedure would not be changed by this variation in form.

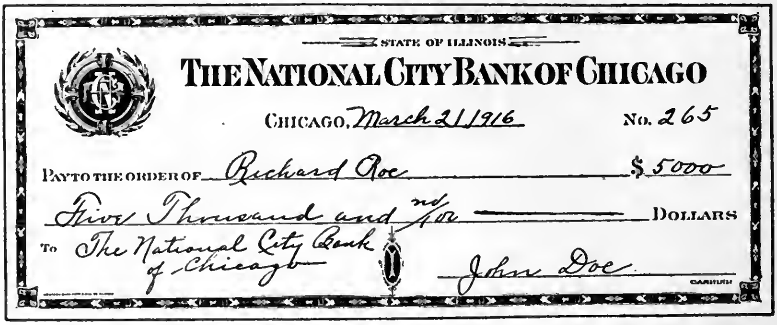
Another possible classification of drafts, according to the time when they are payable, is into (1) sight drafts and (2) time drafts. The forms given so far have all been sight drafts. This is indicated by the fact that they are worded "*At sight* pay to the order of," etc., which means that they are payable at the time of their presentation. A time draft is one which is drawn payable a certain number of days *after sight* or *after date*. In the case of a time draft, if the party upon whom it is drawn is willing to pay it and intends to do so, he indicates this by accepting it at the time it is presented to him, and returning it to the party in whose favor it is drawn. Accepting a draft is accomplished by the acceptor writing the word "Accepted" across the face of the instrument and signing his name. It then becomes his written promise to pay, just as though it were his promissory note. From that time on it will be treated as a promissory note in the records of all parties concerned. The form of a time draft differs in no way from the forms given above, except that instead of the words "At sight" it bears the words "At —— days sight," or "—— days after date."

From the illustrations given, it is apparent that there are three parties to a draft. The one who gives the order is known as the *drawer;* the one to whom the order is addressed, as the *drawee;* and the one to whom it is made payable, as the *payee*. Where a draft is made payable to self, the same party is both drawer and payee. The one who accepts the draft, usually the drawee, is also the *acceptor*, and an accepted draft is usually referred to as an *acceptance*. A special type of draft known as a *trade acceptance* will be discussed later.

It has already been stated that the accepted draft is to be treated as a note. The entry made to record the receipt of such a draft would, therefore, be a debit to notes receivable and a credit to the customer, while the entry to record the acceptance of a draft would be a debit to the creditor and a credit to notes payable.

The cashier's check. The cashier's check is a check drawn by a bank against itself, being signed by the cashier as agent of the bank. Such checks are used for the payment of obligations of the bank itself,

and for transmitting the proceeds of collections made for persons or firms who do not have accounts with the bank making such collections. The form of such a check might be as follows:


STATE OF ILLINOIS
THE NATIONAL CITY BANK OF CHICAGO
CHICAGO, March 21 1916 No. 265
PAY TO THE ORDER OF Richard Roe $ 5000
Five Thousand and no/100 DOLLARS
TO The National City Bank of Chicago
John Doe CASHIER

Express and postal money orders. Express and postal money orders are quite similar, except that the first are issued by the express company and the second by the United States Post-Office. Both these forms of drafts are used for transferring money safely from one city to another. In the case of the express money order, the person desiring to transmit the money pays the company the amount that he desires to transmit, plus the fee for the service, and is given an order payable to the party to whom the money is to be transmitted. This order is sent to the payee, who cashes it at the local office of the express company. The form of an express money order is illustrated below:

EXPRESS MONEY ORDER

WHEN COUNTERSIGNED 13-478392
By Agent at Point of Issue
AMERICAN EXPRESS COMPANY
agrees to transmit and

Pay to the order of DONALD F. TOLLEFSON $750.00
the sum of.........Seven Hundred Fifty and no/100.........Dollars

Paul Nelson Agent
Issued at
St. Paul, State of Minnesota
Date June 5, 1920 RAYMOND S. GLEASON

The postal money order will be issued by a postmaster, upon the sender's written application and the payment of the amount named, plus a fee for the service. Postal money orders will be honored by any postmaster when the holder has been satisfactorily identified.

QUESTIONS FOR CLASS DISCUSSION

1. The James Mercantile Company has five departments and there are ten sales clerks in each department. The accounting department records the sales of all of the clerks. How does it obtain the amount of their sales?
2. The James Mercantile Company desires to know the daily, weekly, and monthly sales of each clerk. How may these statistics be obtained?
3. What is a voucher? Give two purposes which it may serve.
4. The X. Y. Manufacturing Company has a stores department, a purchasing department, and a receiving department. The stores department keeps a record of all goods on hand and when the quantity of any article falls to a certain limit notifies the purchasing department, which places an order for the goods. The goods are received by the receiving department. In case the quantity of goods received does not correspond with the quantity ordered or the quantity shown on the invoice, how can this be detected?
5. What is the difference between the sales invoice and the sales ticket?
6. Explain how the sales ticket may be used as a means of facilitating the recording of both cash and credit sales in the case of a large department store.
7. The Boston Store of Wichita, Kansas, owes Marshall Field and Company, of Chicago, $800.00 for merchandise. Explain three ways by which the Boston Store may pay this amount. Which way will probably be employed?
8. A. M. Elliott owes E. C. Cline $400.00 due this day. Being unable to pay the amount, Elliott offers Cline a note for thirty days in settlement of the account and Cline accepts the offer. State the contents of the note which Elliott will give Cline.
9. Give the entry which Cline will make when he receives the note of Elliott.
10. What are the distinguishing features of
    a) A bank draft?
    b) A commercial draft?
    c) A cashier's check?
    d) An express money order?
    Are these different forms interchangeable as regards their use? Explain.

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chaps. xxiii and xxiv.

MOULTON, H. G., *Financial Organization of Society*, chap. xii.

LABORATORY EXERCISE NO. 31—*Continued*

March 20. Issues checks to the following:
F. M. Jones, $180.00 in payment of invoice of March 10.
Carl Hamlet, $120.00 in payment of invoice of March 10.

21. Receives from A. L. Anderson $250.00 in payment of invoice of March 11.
Pays Missouri Pacific Railroad Company $60.00 in payment of freight on merchandise sent over their roads since March 1.

23. Pays hire of sales clerks as follows:
David Swanson, $12.00.
J. B. Hall, $14.00.
Pays Harry James, bookkeeper, $15.00.
Purchases from Chicago Real Estate Company a lot and building at 200 South State Street, where the business is now conducted, for $5,000.00 cash. The building is valued at $3,000.00 and the lot at $2,000.00. You are allowed $25.00 for unexpired rent. Give check for the balance.

24. Pays Ralph McCoy $350.00 in payment of invoice of March 4. Pays Wabash Railroad Company $60.00 in payment of freight on merchandise received over that road.

26. Sells as follows:
H. L. Dickerson, cash, merchandise, $240.00.
E. N. Atkins, n/10, merchandise, $750.00.
J. B. Foreman, n/15, merchandise, $930.00.

27. Mr. Taylor gives $20.00 of merchandise to the Salvation Army.

28. Gives a thirty-day note for $650.00 to Ralph McCoy in payment of invoice of March 18.
Pays W. T. Dickens $700.00 in payment of invoice of March 18.
Pays F. M. Jones $340.00 in payment of invoice of March 18.

29. Purchases as follows:
Charles A. Hines, n/10, merchandise, $1,010.00.
Mandel Brothers, n/15, merchandise, $2,210.00.

30. Pays A. B. Copeland $150.00 in payment of invoice of March 10.
    Sells M. J. Torr for cash, merchandise, $500.00.
    Sells I. M. Allen, n/30, merchandise, $1,480.00.
31. Receives twenty-day note for $300.00 from M. M. McGee in payment of invoice of March 11.
    Pays petty expense, $30.00.

NOTE.—This exercise is completed at the end of the next chapter.

CHAPTER XV

BUSINESS VOUCHERS AND FORMS—*Concluded*

Indorsement of negotiable instruments. Since the present discussion has to do with *negotiable* instruments, whose distinguishing characteristic, as indicated by the name, is their ability to pass readily from hand to hand and thereby serve to facilitate the transfer of goods, some consideration of the method by which such instruments are to be transferred is appropriate. A legal transfer of a negotiable instrument may be made by means of an *indorsement and delivery* of the instrument, or, in the case of an instrument made payable to bearer, by delivery alone. The indorsement is made by the payee or the holder of the note. It transfers the legal title in the instrument to the one to whom it is indorsed and delivered. It has also the legal effect of a guaranty on the part of the indorser that the instrument is genuine and valid and that he has legal title to it. The indorsement also usually enables the subsequent holder to hold the indorser for the payment of the instrument at maturity, in case the one primarily responsible for such payment should default. In order to so hold the indorser, certain legal requirements concerning notice must be satisfied by the holder. It is not possible to discuss here all the legal questions involved in the indorsement of negotiable instruments. It is possible, however, to point out certain legal consequences of the more common forms of indorsement.

The forms of indorsement which are generally used are as follows:

1. *Indorsement in blank.* An indorsement in blank consists of the name of the payee or holder, written in the customary place on the back of the instrument, without any other writing. It has the effect of making the instrument payable to bearer, and it may be legally transferred by any subsequent holder, without any further indorsement. As a matter of fact, however, it is usual for each holder to be required to indorse the instrument, both for purposes of

identification and to add his guaranty to that of the previous indorsers. An indorsement in blank appears as follows:

FRED S. LANE

2. *Indorsement in full.* This type of indorsement consists of the words "Pay to the order of," written above the name of the party to whom the instrument is to be transferred, with the signature of the indorser appended. This has the effect of making it necessary for the party to whom it is thus transferred to indorse it again in order to transfer the legal title to any subsequent holder. Where negotiable papers are to be sent through the mail, or are to be held for some time by the person to whom they are transferred, this type of indorsement is desirable, since it serves as a protection against any improper use being made of the instrument in case it falls into the possession of someone other than the legal holder. An indorsement in full takes the following form:

Pay to the order of W. A. PETERSON HENRY WILSON

3. *Restrictive indorsement.* A restrictive indorsement is one which transfers the title but restricts the use of the instrument. Checks and other negotiable instruments sent to the bank for deposit should be safeguarded by including in the indorsement the words "For Deposit." This prevents their use for any other purpose, as it serves notice on anyone to whom they might be transferred, and prevents such subsequent transferee from acquiring a legal title. Many business concerns use a rubber stamp with the form of this type of indorsement, bearing the words "Pay to the order of————Bank, for deposits," to which is added the signature of the depositor. The form in which such indorsement appears is as follows:

Pay to the order of THE UNIVERSITY STATE BANK For Deposit H. L. MURRAY

4. *Qualified indorsement.* A qualified indorsement is one which transfers the title to the instrument, but does not guarantee its payment. This indorsement is accomplished by adding the words "Without Recourse." When an instrument is so indorsed the indorsee cannot recover from the indorser if the maker of the instrument fails to pay it. The form of such an indorsement is as follows:

Pay to the order of THE KENWOOD TRUST COMPANY Without Recourse THOS. H. SHERIDAN

The proper position of the indorsement on a negotiable instrument is on the back of the instrument, written across the left-hand end of the paper, as in the above illustrations.

Sometimes partial payments are made on negotiable instruments, such as promissory notes and time drafts. In such a case, it is customary for the holder to record such payments on the back of the instrument by writing the date and the amount of the payment. No signature should be attached to such a memorandum on the back of the instrument, since such signature might be interpreted as an indorsement and open the way to an improper use of the paper by anyone who might get possession of it.

A negotiable instrument should be signed or indorsed by the party or parties who assume the responsibility indicated by such signature or indorsement, or by a duly authorized agent. In a partnership known as a "trading" partnership, as distinguished from partnerships of professional men, each partner has the power to sign negotiable instruments and to bind the firm by his action, provided such instruments are given in connection with the regular conduct of the partnership business. In a corporation the by-laws specify who shall be authorized to sign such instruments. In the case of a negotiable instrument bearing the signature of a partnership or a corporation, not only the signature of the firm appears but also that of the duly authorized agent who signs the firm name.

Miscellaneous business forms. Besides the special class of negotiable vouchers discussed above, and the vouchers used in connection with the purchase and sale of merchandise, there are a great number

of other forms which may arise in connection with business transactions. It is neither practicable nor useful to attempt to name or discuss all of these forms at this point, but certain of the more common ones may be briefly considered here. The more important of these forms, for present purposes, are as follows:

1. The statement of account
2. The receipt
3. The bill of lading
4. Forms used in connection with banking transactions:
   a) The deposit ticket
   b) The signature card
   c) The pass book
   d) The bank statement
   e) The check book

The statement of account. It has already been explained that when goods are sold an invoice or sales ticket is delivered to the customer, giving the essential facts with regard to the sale, including the quantities of the goods, the prices, the total amount, and the terms of sale. In the case of goods sold at wholesale each invoice is payable at a certain date, and the customer is supposed to remit on or before that date without any reminder from the creditor. However, such reminders are in fact frequently necessary, and usually take the form of letters requesting a remittance. If several invoices are due and unpaid at any one time, the creditor may send a statement of the amounts of such invoices and the total due to date. The sending of statements of account, however, is not a usual practice among wholesale businesses.

Retail sales made on credit are usually understood to be on monthly account, unless otherwise specified, and since the customer cannot be reasonably expected to keep a record of his exact indebtedness and remit when the amount is due, it is customary for retail establishments to send each customer a summary of his account at the beginning of each month. This serves the double purpose of a convenience to the customer and of facilitating and hastening collections. Such a summary is known as a "statement of account." An illustration of the form of statement of account which is typical of the larger retail businesses is shown on page 178.

To avoid delays address all correspondence direct to MANDEL BROTHERS, State to Wabash at Madison Street

Bought of

MANDEL BROTHERS
CHICAGO

May 1, 1920

W. S. Schuler
912 E 53d St.
Chicago, Ill.

Please detach and return this coupon with your remittance

Folio 7/3245 Amount ______

. . . .

Bought of MANDEL BROTHERS, Chicago

Payable first to tenth of month following that of purchase

	March			$16.28	
	April				
8251	5	1 pr. low shoes		11.10	
8762	15	2 shirts	$4.25	8.50	
9235	22	1 hat		10.50	
9568	22	4 pr. hose	.75	3.00	
9568	25	2 pr. hose returned	.75		$1.50
9783	25	1 dress tie		1.00	
		Total		$50.38	
		Less credits		1.50	
				$48.88	

Paid ______ 19__ Check No. ______ Amount ______

The top part of this statement, which is perforated for detachment from the lower part, is really another kind of voucher. It is a *remittance slip*, intended to be detached and returned with the remittance, and is used by the selling concern as a voucher for the recording of cash received from customers in payment of their accounts. The use of this form will be discussed in a later chapter.

The receipt. A receipt is a written acknowledgment given by the party receiving money in discharge of an obligation to the one making such payment. In the past this form was much in use, but in modern business practice it is almost obsolete. Where payments are

made by check, as is the general practice, the canceled check from the bank, bearing the indorsement of the creditor, usually serves well enough as a receipt. Or the bill or statement may be receipted by stamping on its face some such form as the following:

Received Payment
June 3, 1920
CENTRAL SUPPLY CO.
Per________________

Most modern business concerns do not return to the customer any form of receipt other than that of the canceled check which he eventually receives from the bank, bearing the creditor's indorsement. If the customer desires a receipt which can be identified with the particular invoice or invoices covered by the check, he can secure this by having a form printed on the check for the entry of the numbers of the invoice covered, or of any other information of similar type.

The bill of lading. In connection with the work of marketing (buying and selling goods), one very important function which must be performed is that of transportation. This involves dealings with railroad companies and other transportation agencies. When goods are turned over to a railroad company for shipment the shipper receives from the railroad company an instrument which constitutes evidence of the contract entered into between the two parties, and also serves the shipper as a receipt for the delivery of the goods to the carrier. This rather formal document is known as a *bill of lading.* It sets forth the provisions of the contract under which the carrier accepts the goods for shipment, defines the carrier's liabilities, and states the duties of the shipper in connection with such shipment. The form of the bill of lading is a standard one, being prescribed for the use of all the roads doing interstate business by the Interstate Commerce Commission. In case the shipper wishes to have the bills of lading used in shipping his goods printed on his own form for convenience in filing he is permitted to do so, provided the form used conforms to the requirements of the standard form.

There are two forms of the bill of lading. The one more commonly used is known as the *straight* bill of lading. In this form the goods are consigned to the party who is eventually to receive them, and the

bill of lading is not negotiable. This form is used where satisfactory credit relations exist between the shipper and the party to whom the goods are shipped, and no conditions are intended to be attached to the receipt of the goods by the latter. The other form is known as the *order* bill of lading, and is negotiable. In the use of this form, the goods are consigned to the shipper or some agent of the shipper, and the purchaser cannot get the goods until he has the bill of lading. This enables the shipper to withhold actual delivery of the goods until the purchaser has satisfied the shipper's conditions with respect to payment for the goods. The use of this method of shipment will be discussed more fully in chapter xvii.

The bill of lading is usually made out in triplicate. The original is signed by both the shipper and the agent of the carrier, and serves the shipper as evidence of his contract with the transportation company, and as a receipt for the delivery of the goods to the company. This copy must be preserved for use in case of any claims for damages which are later made by the shipper. The second copy is known as the shipping order, and is signed only by the shipper. It is retained by the railroad as evidence of its authorization to ship the goods. The third copy is a duplicate of the first, being signed by both parties, and given to the shipper as a duplicate receipt. It may be sent with the invoice to the consignee. In some cities where a central traffic association is maintained by the business men of the city, a fourth copy is made for filing in the offices of this organization.

Forms used in connection with transactions with the bank. It has already been indicated that it is customary for business men to depoist all cash (including checks and other bankable paper) received with some bank, and to discharge their obligations by giving the creditor a check against the bank. This practice is almost universal in modern business. The receiver of the check deposits it with his own bank, which credits his account with the amount, and then collects from the bank on which the check is drawn. In case both deal with the same bank, the bank merely subtracts the amount of the check from the account of the drawer, and adds it to the account of the one depositing the check. Some of the forms in common use in connection with banking transactions of this character are: (1) the deposit ticket; (2) the signature card; (3) the pass book; (4) the bank statement; (5) the check book.

The deposit ticket. When a depositor makes a deposit with his bank, he fills out a form supplied by the bank, known as a *deposit ticket.* This form provides for a record of the name of the depositor, the date, the total amount of currency, gold, and silver deposited, and for a classification of the checks deposited. A form of such a deposit ticket is shown below:

May 5, 1920

FIRST NATIONAL BANK

CREDIT ACCOUNT OF

WM. J. CONWAY

Checks on Other Banks					Checks on This Bank	
Cont. and Com.	$125	00			$212	80
Drovers Nat'l.	65	50				
Corn Exchange	236	25				
Total	426	75				
			Total Checks on this Bank............		212	80
			Total Checks on Other Banks...........		426	75
			Currency..............		168	00
			Gold..................			
			Silver.................		53	65
			Total.................		861	20
			Less Exchange.........			24
					860	96

If the deposit to be made is large in amount, and in various forms, the following suggestions may be worth while: (1) If a considerable number of coins are to be deposited, they should be wrapped in convenient amounts in coin wrappers provided by the bank. (2) Paper

money should be arranged in the order of its denomination, with the smallest bills on top. (3) Checks should be arranged in the order in which they are listed on the deposit ticket. (4) Each check should be properly indorsed. (5) The items should be totaled and the total entered in the space provided.

The signature card used for identification of depositor's signature. The signature card is merely a card kept in the records of the bank by means of which the signature of the depositor may be identified at any time. The depositor is required to fill out such a card at the time he opens his account with the bank. If at any time the depositor desires to change the signature that is to be honored on checks against his account, a record of this change must be given the bank.

The pass book. When the depositor opens his account with the bank and makes his first deposit, he is given a book known as a *pass book* in which a record is made of each deposit. Whenever he makes a deposit he is supposed to bring this pass book and present it to the teller along with the deposit slip. The teller retains the deposit slip as a basis for the bank's record of the transaction, and enters the amount of the deposit in the pass book to serve as the depositor's record of the transaction. Formerly it was customary for the depositor to leave his pass book at the bank once a month, when the amount of his withdrawals, as evidenced by his canceled checks returned, was entered in the book, being subtracted from the amount of the balance at the beginning plus the total deposits for the month to give his balance at the end of the month. This practice is no longer generally followed. Most of the banks now present monthly statements of the depositor's account in place of the balanced pass book. These statements are made up by the use of a bank posting machine which saves labor and adds to the accuracy of the computations.

The bank statement. The statement rendered by a bank to each of its customers at the end of the month is not unlike that sent out by a large retail establishment, except that it shows a balance due the customer from the bank instead of a balance due the store from the customer. Some banks use what is known as the envelope form of statement, which means simply that the statement is made out on the back of an envelope, in which the canceled checks are inclosed. A form of bank statement, such as is used by the more up-to-date banks, is illustrated on page 183.

Please Examine at Once

27 Vouchers Returned

J. H. Henderson
5740 Kimbark Ave.
Chicago, Ill.

In account with FARMER'S NATIONAL BANK
Chicago, Ill. Statement of your account for April

Notify us of any change in your address. If no error is reported in ten days, the account will be considered correct.

Date	Checks in Detail			Date	Deposits	Date	Balance
			Balance Brought Forward		201 54		
April 1	6.35					April 1	195 19*
April 2	2.50					April 2	192 69*
April 5	15.00	3.00	6.00				
April 5	78.00			April 5	229 16	April 5	319 85*
April 9	10.00	15.00				April 9	294 85*
April 12	10.00			April 12	11,670 00	April 12	11,954 85*
April 15	296.00	42.50				April 15	11,616 35*
				April 16	56 18	April 16	11,672 51*
April 17	42.90	9,978.09	985.22			April 17	666 30*
April 19	5.88	12.97	23.00				
April 19	2.36	5.00	25.00				
April 19	7.30	15.00				April 19	569 79*
April 20	5.15					April 20	564 64*
April 21	10.00			April 21	60 00	April 21	614 64*
April 23	486.22	5.00				April 23	123 42*
April 28	5.00					April 28	118 42*

The check. Considerable attention has been given in the preceding pages to the nature, form, and use of the check. Checks are ordinarily issued from a bound book, which contains stubs for entering the details of each check issued. The check and the stub should be filled out at the same time, both bearing the same serial number. The check is then torn off at the perforation and issued, while the stub is kept in the book as a record of the issued check. If accounts are carried with more than one bank, a different check book will be used for each bank. The stubs in the check book frequently serve as a basis for the entry in the cash book of cash disbursements and as vouchers for such disbursements.

QUESTIONS FOR CLASS DISCUSSION

1. Of what importance to the business man is a knowledge of the legal effect of the various methods of indorsement?
2. Do you consider it justifiable to devote space in an accounting text to a discussion of forms used in connection with banking operations? Why, or why not?
3. What purposes may be served by a statement of account like the one illustrated on page 178? What method or methods might be employed in preparing such a statement?
4. What is "two-name paper"? Is it necessarily more acceptable to a bank than "one-name paper"? Discuss.
5. The Columbia Phonograph Company, of New York, sells a large order of goods to the Jones Music Company, of Chicago. The selling company is doubtful of the purchaser's credit, and stipulates that the Chicago office of the seller shall collect for the merchandise before it is delivered to the purchaser. At the same time this order is shipped a consignment of goods is shipped to the Chicago branch of the Columbia Phonograph Company for display purposes. What method of shipment would you recommend for each lot of goods? Explain your answer.
6. What is the importance of the bank statement to the accountant? What uses can he make of this statement?
7. What is the purpose of the deposit ticket? Who makes it out? Is the deposit ticket a voucher? Explain.
8. You transfer the check of a customer to a creditor. The latter presents it to the bank upon which it is drawn, and payment is refused because the maker has not sufficient funds on deposit. In what way will this affect you?

9. On June 30 your bank statement shows a balance to your credit of \$1,500.00. Your records show that your bank balance is \$1,150.00. Explain.
10. Under what circumstances might a negotiable instrument be transferred with a qualified indorsement? What rights have subsequent holders against such indorser?
11. If a retailer sends a wholesaler his check in payment of an account, does he expect a receipt? If not, how is he protected against paying again?

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chap. xxiv.
MOULTON, H. G., *Financial Organization of Society*, chap. xii.

LABORATORY EXERCISE NO. 31—*Concluded*

Instructions:

In charging the salaries of clerks, the salary of Harry James is to be considered an administrative expense and the salaries of all others are to be considered a selling expense.

Post all transactions to the ledger and take a trial balance.

Make a statement of profit and loss and the balance sheet, taking into consideration the following points:

a) Inventory of merchandise, \$2,900.00.

b) Depreciation of buildings, 1 per cent.

c) Depreciation on office furniture, 2 per cent.

Make the journal entries necessary to give affect to the adjustments stated above and post these entries.

Close ledger by means of journal entries, rule up all books of original entry.

CHAPTER XVI

THE ACCOUNTING PROCESS

Purpose of the chapter. In the preceding chapters it was intended to present in the simplest possible manner the various steps or processes necessary in gathering, recording, summarizing, and interpreting the data of business operations from the point of view of making such data available for the use of the business manager in planning and controlling the future operations. Notwithstanding the effort to simplify this presentation, it has run through a considerable number of pages and has involved a considerable amount of detail. It is expedient, therefore, to give a brief summary of the various steps thus far outlined.

Accounting reports. Throughout the discussion it has been emphasized that the aim of the accounting process is to make available the information needed for reports to the management, and to have this information classified in such a manner as to make these reports as useful as possible. By the "management," as the term is here used, is meant the owners of the business or the persons to whom these owners have delegated their managerial authority. It is, accordingly, to the owners or their representatives that the accounting reports are to be submitted, and it is to their peculiar needs that the presentation of the data should be adapted. It must be remembered that the typical owner or manager is not a man trained in the technicalities of accounting. The reports must therefore be freed from such technicalities in so far as this is possible, while presenting the information which will be of the most use to the manager in question. It is quite evident that the nature of such information will vary with the nature of the business enterprise and with its internal organization. This means that the information needed as an aid to the management of a retail clothing store would be of a different nature and would be classified on a different basis from that needed by the management of a shoe factory. It means also that the information which should be presented for the use of the management of a

small clothing store, with all the buying and the entire administration of the shop in the hands of a single man, would be quite different in the amount of detail and in the classification of the items from that needed for the use of the management of a large retail clothing establishment with several departments and a manager in charge of each department.

In both cases, however, the need for reports of some kind unmistakably exists. The reports for the manager of the small retail store might be prepared by himself, and might be very simple indeed. The big clothing store might maintain a considerable staff and a complex accounting system for the purpose of gathering the information, and might require several kinds of reports, each classifying the information on a different basis and for a different purpose. In each case, however, some kind of reporting is necessary, and the accounting system and records must be designed with the aim of gathering and classifying the business data in such a way as to make this reporting possible. In designing these records for any given business, therefore, one should first determine what use is to be made of the data and then set up the records which will best perform their function of furnishing the information needed in preparing each of the reports needed.

There is almost no limit to the number of reports which may be useful in a large business with a number of subordinate managers. There are, however, two reports which are used in every kind of business. These two reports, which furnish certain information about the business as a whole, will be considered for the present as typical of all accounting reports. They are: (1) the *balance sheet*, which shows the amount and nature of the assets, liabilities, and proprietorship of the business as they appear at a stated time; (2) the *statement of profit and loss*, which gives the amount and nature of the income and expenses of the business for a stated period, and the difference between the two—the net profit or loss for the period.

In the preceding chapters these two reports have been used to illustrate the function of reports as a whole, and to bring out the relationship between the reports and the whole accounting process necessary for their preparation. They have been used for this purpose because they are the most generally used of all accounting reports, and because they serve better than any other forms to illustrate the

relationship between the reports and the accounting process as a whole. If the student succeeds in understanding thoroughly the function of these reports and their relationship to the accounting process, it should not be very difficult for him to understand the other forms which he will need to use in his later work.

The accounts. It was explained in the preceding chapters that the accounting reports are prepared from the information furnished by the *accounts*. It follows that the number and nature of the accounts to be kept will be determined by the information which is to appear in the reports. For each item of information which is to be shown on any accounting report there must be maintained an account. This rule has certain exceptions in those items on the reports which are obtained by combining other items. Examples of such items are "gross profit on sales" and "total current assets." The accounts are so constructed as to reflect the effect of every business transaction on the financial condition of the business. The nature of the item whose status is reflected by the account is indicated by the account title. In order that the information presented by the accounting reports shall be intelligible and free from ambiguity, the account titles should be very carefully chosen to represent in each case exactly the nature of the item in question. The primary function of the account is to classify and keep a record of the information desired for the accounting reports. No attempt should be made, therefore, to prepare a list of accounts to be used by any business until the nature of the reports needed by that business and the information to be shown by each such report have been determined. It is for this reason that, in the discussion of the accounting process in the preceding chapters, the reports were considered first.

The books of original entry. It has been shown that every business transaction affects certain of the accounts, and that this effect must be recorded in every account so affected. But for various reasons previously explained it is not desirable that the entries for the transactions should be made directly to the accounts themselves. Instead, a record of each transaction, showing all the accounts affected and the manner in which they are affected, is made in one of the *books of original entry*, from which the information is later "posted" to the proper accounts. The number of such books of original entry and the nature of each should be determined by the number of types of

transactions occurring in the business, the importance of each type, and the classification which is desired of each kind of transaction. Whenever a given type of transaction becomes frequent enough to assume importance, a special book of original entry should be provided for recording such transactions. All transactions for which no such special journal is provided will be entered in the general journal. Each book of original entry aside from the general journal, should be designed to provide a summary of all transactions of a certain kind.

In the ordinary mercantile business the transactions which occur most frequently are those involving cash receipts, cash disbursements, merchandise purchases, and merchandise sales. For this reason the special journals that have been discussed in the preceding chapters for purposes of illustration are the cash receipts journal and cash disbursements journal, which together compose the cash book or cash journal, the purchases journal, and the sales journal. It should be remembered that any special form of book of original entry is a journal, and any entry made in such a book involves debits and credits of equal amount. In making an entry in a book of original entry, therefore, the transaction should first be mentally "journalized." That is to say, the transaction should be analyzed with regard to its effect on the accounts and ultimately on the reports before it is entered in a book which serves as a basis of posting to the accounts.

Business vouchers and forms. The information which serves as a basis for entering a transaction in the proper book of original entry is usually furnished by some form of voucher arising out of the transaction itself. As previously pointed out, such vouchers serve not only as evidence of the transactions giving rise to them, and as a basis of entering these transactions in the books of original entry, but also in many cases as a means of facilitating the transaction. There are certain types of vouchers which serve only the latter purpose. One very important class of vouchers is composed of the papers arising out of transactions involved in the purchase or sale of merchandise. Another important class is composed of those papers which serve as a means of discharging obligation between various individuals and firms. This class has certain peculiar features which are recognized by the courts and embodied in the statute law of a number of states, and papers of this class are known as *negotiable instruments.* The classification under which vouchers in general are

considered in a previous chapter may be repeated here, as follows: (1) vouchers used in connection with the purchase and sale of merchandise; (2) negotiable instruments, or negotiable vouchers; (3) miscellaneous vouchers and forms.

The accounting process. The steps outlined in the foregoing discussion form a regular sequence, which may be called the *accounting process.* This process begins with the performance of the transaction itself and ends in showing in the reports of the business the effect of the transactions recorded. The steps in this sequence, in the order in which they actually occur, may be indicated as follows: transactions—vouchers—books of original entry—accounts—reports. Each step of this process has been described somewhere in the preceding pages. The *transactions* which are performed in carrying on the business operations give rise to various types of *vouchers* which serve as evidences of these transactions, and as a basis of entering them. From these vouchers a record of each transaction is made in the appropriate journal, or *book of original entry.* Each of these books of original entry, with the exception of the general journal, is designed for the recording of one particular class of transactions, and provides for a summary of all the transactions of that class. After the transactions have been entered in the various journals, they are *posted* from the books of original entry to the *accounts* in the ledger, and at the end of the period a summary is made of the accounts, and the information thus obtained is used in the preparation of the *reports.* This summariezs the accounting process of all businesses which have an accounting system, though the process will, of course, vary in the amount of its detail and in the complexity of the routine to be followed. It is not to be supposed that the forms of the vouchers, books of original entry, and reports given in the preceding chapters for purposes of illustration represent standardized forms applicable in all businesses. They are intended only to be suggestive and to illustrate in a simple way the fundamental principles involved in the use of such forms. These fundamental principles, which were applied in working out the illustrations given in the first part of the course, will be found to apply, with few exceptions, to any sort of accounting system that may be under consideration.

The order which has just been indicated as the order in which the steps of the accounting process actually occur is not the order in which

they have been discussed in the preceding chapters, as the student will readily recall. The steps have been taken up for discussion in exactly the reverse order to that in which they take place.

The reason for following this reverse order has been explained more than once. It is that the type of information and the classification of this information which is desired in the reports determines for the most part the number and the nature of the accounts. The information which is desired in the accounts and the classification to be made of that information in turn determine largely the number and form of the books of original entry. The information to be recorded in the books of original entry influences to a considerable degree the information which will need to be provided by the vouchers concerning the original transactions. Thus by following the order that has been followed in the consideration of the accounting process in the earlier chapters, it is possible to see and understand the factors which affect each of the steps in the accounting process, before proceeding to a consideration of that step itself.

Importance of the accounting process. The student need not hope to be able to familiarize himself with all the various accounting systems and forms employed by business concerns. It would be impossible to do this during a college course, and probably even during a lifetime. And if such a thing were possible, it would scarcely be a valuable form of knowledge. If the student has a working knowledge of the nature and function of the accounting process, he should experience little difficulty in understanding the special forms and records employed by any business as a part of its accounting system. Also, he should be able readily to interpret any special forms of reports that may come before him in case his work lies outside the accounting department.

QUESTIONS FOR CLASS DISCUSSION

1. Explain and illustrate the relation of accounting to business management.
2. What is the purpose of an accounting report?
3. What are the two reports which are most frequently used by business men? Discuss the uses which may be made of the information presented in each of these reports.
4. How are the assets and liabilities of a business classified on the balance sheet? Give the significance of this classification.

5. Give the points which you would regard as of most importance in determining the financial condition of a business from its balance sheet.
6. What items have to be considered in arriving at the cost of goods sold?
7. How is the value of the inventory which appears on the balance sheet and the statement of profit and loss determined?
8. Explain and illustrate the difference between operating and non-operating expenses; operating and non-operating income.
9. What determines the number and nature of the accounts kept by a business?
10. Explain the construction of accounts with fixed assets.
11. What is meant by the "balance" of an account? When an account is "in balance" how is this indicated?
12. Explain how the number and nature of the expense accounts which a business maintains is determined.
13. What is the purpose of the trial balance and how often should it be made?
14. What is the purpose of "adjusting" entries? Explain and illustrate how they are made.
15. What is the purpose of the "closing" entries? Explain and illustrate how they are made.
16. Why are entries first made in books of original entry instead of being entered directly in the accounts?
17. Give the principal books of original entry, the purpose of each and how each is posted.
18. Explain and illustrate the purpose of a voucher.
19. What are the requisites of a negotiable instrument? Illustrate each.
20. Explain and illustrate the ways in which a negotiable instrument may be indorsed.
21. What is meant by the "accounting process"? Why is an understanding of this process important?

CHAPTER XVII

BUSINESS PRACTICE AND PROCEDURE—PURCHASES AND SALES

Purpose of the chapter. In chapter xvi the successive steps of the accounting process were reviewed, and their relations to one another discussed. In the present chapter the business transaction and the nature of the routine involved in handling certain of the more common types of such transaction will be considered. This will involve a discussion of business practice and a further consideration of the use of business papers in handling some of these transactions.

Methods of handling purchases. Under present business practice, there is no such thing as a standardized purchase routine. The routine used varies with the nature of the business and is therefore usually different in wholesale, retail, and manufacturing businesses. Also, within any one of these three classes the purchase routine may be expected to vary somewhat with the size of the business, the nature of the goods handled, and more especially with the organization of the business. Thus the internal organization may be such that all the purchasing may be handled by the proprietor, by one of the partners, or by a single subordinate. Or a single purchasing department may be provided, headed by a purchasing manager who is in charge of all purchases. Or the business may be divided into departments, corresponding to a certain grouping of the commodities sold, and the head of each department, or someone under him, made responsible for the purchase of all merchandise to be sold in that department. With this last form of organization there would usually still be a purchasing department for the entire business, the head of this department being responsible for the purchase of supplies for the entire establishment. In addition, there may be an official known as the merchandise manager, who exercises a general supervision over the work of all the departmental buyers.

The single purchase manager, responsible for all purchases for the business and heading a special purchasing department, is usually to

be found in a manufacturing business, while the departmental organization, with each department head responsible for the merchandise purchases within his department, is characteristic of wholesale businesses and the larger retail establishments.

The purchase requisition. Where the organization provides for a general purchasing agent, he may make a large part of his purchases

PURCHASE REQUISITION No. *121*

Date *Aug. 4* From *W. H. S.*

Quantity *5M*

Article *½" Hexagonal Nuts*

Date required *Aug. 20*

Advise Mr. *Jordan* on delivery

Required for *Production Order No. 98*

Purchase Order No. *475* Date *Aug. 7*

Issued to *W. F. Hebard Co.*

Originated by *H. G. M.* | Approved by *L. C. M.*

according to a predetermined plan, drawn up by him after conference with others of the managerial staff, and representing his judgment of the ordinary needs of the business. Large purchases in advance of actual needs may sometimes be made by him when market conditions make it seem desirable to build up a reserve stock of certain articles. Still other purchases may be made at the request of other departments

of the business, to fill special needs that will arise from time to time. An example of this is a purchase of steel castings required for the manufacture of a special order received by a manufacturing company. In cases where request is made of the purchasing agent for the purchase of any particular lot of material, such request usually follows a regular form, known as a *purchase requisition.* The essentials of a purchase requisition are indicated by the illustration shown on page 194.

The purchase order. Regardless of the nature of the purchasing organization, or of the kind of goods that are to be purchased, there must always issue some sort of *purchase order* from the purchasing concern to the one from which the goods are purchased. And in a business establishment where any systematic attempt at record keeping is made, such an order will be in writing, or will be confirmed in writing, and at least one copy will be kept for the files of the purchasing concern. Ordinarily there will be a regular printed form for purchase orders, and this form will be filled out, with one or more carbon copies, each time an order is sent. In a small business with simple organization, it is sufficient to have the order made out in duplicate, the original sent to the seller, and the copy retained in the office. But in a large business, or one with a more elaborate organization, there may be, besides the original order, the following copies: (1) a copy to be retained by the purchasing department; (2) a copy to be sent to the department where the purchase requisition originated; (3) a copy for the accounting department; (4) a copy for the receiving clerk (this copy is often left blank as to quantities, so that the quantities may be filled in upon receipt and count of the goods themselves); (5) a copy for the stores clerk or store keeper, so that he may know not only what goods are on hand but what are ordered and when delivery may be expected.

The information furnished by the purchase order varies somewhat in different businesses, but the information usually considered essential is provided in the order blank illustrated on page 196.

The form shown above is a simple one. For a more elaborate form the student is referred to the illustration of the sales order shown on page 198, since from the point of view of the purchasing concern that form represents a purchases order.

THE CENTRAL SUPPLY COMPANY
INDIANAPOLIS

Date__________ 19__ Req. No._____ Purch Ord. No. ____

To.................................... Via.............

Address.............................. R. R...............

Ship to..

Shipment to be made......................... Terms...........

Signed ____________________

The purchase invoice. The purchase invoice, which was discussed in chapter xiv, is usually received from the seller before the goods arrive. The form of such an invoice is shown on page 162. The invoice should be sent first to the purchasing department or to the member of the organization who is responsible for the purchase, and should there be checked to ascertain whether it agrees with the purchase order in quantities, prices, and terms. When the shipment of goods arrives, it should be checked to see if the quantity is correct, and the purchasing agent, department head, or other responsible individual should make sure, by tests if necessary, that the quality is satisfactory and according to the purchase agreement. In checking the quantity of goods received, the invoice may be used or the receiving department may make a separate report on quantities received, which is then compared with the invoice and with the purchase order. This report is often made by filling in the quantities on a copy of the purchase order from which the quantities have been omitted for that purpose.

When the invoice has been verified in every essential respect, it goes to the accounting department, where the extensions are verified, and is then used as a basis for recording the purchase. If the amount of the invoice differs from what the purchaser considers the correct figure, it may be entered at the face of the invoice and a claim put in for an adjustment to bring about the necessary corrections, or its entry may be postponed until the purchaser and seller have come to an agreement on the matter.

Methods of handling sales—the sales order. The methods employed in making sales and in conducting the sales routine also vary quite widely with the nature of the particular business and with the manner of its internal organization. But whether the business is large or small, and whether sales are made at wholesale or at retail, the sales transaction always starts with the *sales order*. The sales order as it comes from the customer may be either written or oral. In a wholesale business the order may come directly from the customer, by mail or by telegram, in written form. It may be given orally by the customer to a salesman, either at the salesrooms of the selling concern or at the customer's place of business. Or it may be given by the customer over the telephone. In any case the procedure is usually to make out the order on a regular house form, drawn up in such a way as to facilitate the various steps involved in filling the order. Where the customer sends in a written order on his own form, this can be used by stamping on it a form providing for a check on each of the various steps. An illustration of a sales order, showing what information would usually be sought, is shown on page 198.

The sales order in the wholesale establishment, once made out, ordinarily goes first to the credit department for approval. If approved there, it is usually listed in an order book or order register to avoid losing track of it. It may then be sent to the pricing department to have the prices entered, if this has not been done earlier. The next step is to send the order to the stock room, where the goods are set out, each item being checked on the order as it is selected. The order and the goods are then turned over to the shipping department, where the goods are packed, marked, and shipped, and the order is checked to indicate that the goods have been shipped. The order then goes back to the office. If an order register is kept, an entry will be made in it to show that the order has been shipped. The order is

HIBBARD, SPENCER, BARTLETT & CO.
State Street Bridge
CHICAGO

Estimate ______ Date Sold ______

Order No. ___ Salesman ______ No. ___

Name ____________ P.O. ____________
(If different from destination)

Destination ________ State ______

Via ____________________

R.R. ____________________

	Name	Date	Time
O.K.			
Order Clerk			
Sent to Office			
Pricer			
Examiner			

This order is given as specified below, for shipment from ____________ about __________ 19___, invoice to date ________ sixty days or 2 per cent discount for cash in ten days. The order is subject to approved credit at date of shipment.

(*Signed*) ____________________

	Shipping Check	Quantity	Items	List Price	Net Price	Extensions

then used as a basis for making out the sales invoice, and either the order itself or a copy of the invoice is sent to the accounting department to serve as a basis of recording the sales transaction. This discussion of the use made of the sales order contemplates an order made out on a house form of the selling concern, with one or more

copies. Where no copy of the order exists except the one sent by the purchaser, the invoice might be made out at once and a copy of the invoice used as a basis for the routine just described.

The sales invoice. In a retail establishment orders may come in any form, but are typically given orally by the customer. The order is filled immediately, and the sales ticket is made, usually in duplicate. One of these copies goes to the customer and the other serves as a basis of analyzing and entering the sales transactions in the accounting department. In many of the larger establishments additional copies are used.

In a wholesale business at least two copies of the sales invoice are filled out, and usually a greater number. Besides the original, which goes to the customer, other copies may be required as follows:

1. A copy for the files of the accounting department, where it may be used for the following purposes:
   a) As a basis of entering the transaction
   b) To be filed in a "tickler" file until paid
   c) To be kept for possible reference in an audit at the end of the account period
   d) To furnish any information concerning sales not shown by the ledger accounts, which may be desired in the preparation of special reports, such as sales estimates

2. A copy for the "tickler" file kept on unpaid invoices by the credit department, assuming this to be separate from the accounting department.

3. A copy for the sales manager, who may wish to obtain from the invoices some special information concerning sales, such as the amount sold by each of his salesmen.

4. A copy for the office of the treasurer, who may wish to use the sales tickets as a basis for estimating the funds that will be available from this source in the near future.

Shipping or delivery of merchandise. It is apparent that a part of the process of filling a sales order consists in shipping or delivering the goods to the customer. In a retail store this may mean merely wrapping the goods and handing them to the customer at the time of the sale, or it may mean delivering the goods through the delivery service of the store. Neither method involves any problems that need to be discussed in this chapter.

In a wholesale business, however, a large part of the sales are often made to customers outside the city, and practically all sales require arrangements for their delivery. Leaving out of consideration all city deliveries, which may be delivered by the concern's own trucks or contracted for with a transfer company, out-of-town deliveries may be made by freight, express, or parcels post. In shipping goods by express the shipper receives from the carrier an *express receipt*. In shipping by freight he receives a *bill of lading*, the form of which has already been discussed.

In shipping by freight when credit matters have been satisfactorily arranged, the "straight" bill of lading is used, by which the goods are consigned direct to the purchaser, who is notified by the carrier as soon as the goods arrive and proceeds to get them without further ceremony. But where the seller is unwilling to relinquish the goods without receiving payment the shipment is made by an "order" bill of lading, in which the shipper or his agent is made the consignee. A draft is drawn by the shipper upon the purchaser, and this draft is attached to the bill of lading. The latter, with the attached draft, may then be forwarded to some agent of the shipper in the city to which the goods are shipped, or more usually deposited with the seller's home bank. The bank proceeds to forward the papers to its correspondent bank in the purchaser's city. In the meantime the purchaser will be given notice of the method of shipment and where the bill of lading can be obtained. Only by paying the draft is he able to secure the bill of lading and so get the goods from the carrier. This method of shipment is known as shipment "by bill of lading with draft attached."

QUESTIONS FOR CLASS DISCUSSION

1. What persons should you expect to be responsible for purchases of merchandise, raw materials, or supplies in each of the following businesses:
   a) A retail shoe store?
   b) A wholesale hardware business?
   c) An automobile factory?
   d) A department store?
   e) A mail order business?
2. What is a purchase requisition? What advantages are there in the use of such a requisition?

3. In which of the businesses listed under Question 1 should you expect to find purchase requisitions in use? For what type of purchases would requisitions be used in each case?
4. W. D. Allen & Company, a wholesale hardware business, order a shipment of cutlery from the William B. Simmons Company, of St. Louis. What items of information should the purchase order furnish? What purpose does each such item of information serve?
5. How many copies of the purchase order do you think W. D. Allen & Company should have made? What purpose would each copy serve?
6. When W. D. Allen & Company receive the purchase invoice for the goods ordered, what procedure should be followed before recording this invoice in the purchases journal?
7. What would be the nature of the sales orders received, and the sources from which such orders might be received, in each of the businesses listed in Question 1?
8. When the William B. Simmons Company made out the invoice for the goods shipped to W. D. Allen & Company, how many copies do you think they should make? What use might be made of each copy?
9. Suppose the Simmons Company were unwilling to sell to the Allen Company on credit. What method or methods of collection might they employ in order to protect themselves?
10. Why do different business organizations have different methods of handling purchasing routine? Would it not simplify matters if a uniform routine were followed?
11. What items of information are ordinarily recorded on the retail sales ticket? Suggest how each such item of information may be of use to the management.
12. Upon what information would the buying program of a departmental head in a department store be based? Suggest some facts that might limit the extent of his purchases.

REFERENCES FOR FURTHER STUDY

Greendlinger, Leo, *Financial and Business Statements*, pp. 48–57.
Jones, E. D., *The Administration of Industrial Enterprises*, chap. xvii.

CHAPTER XVIII

BUSINESS PRACTICE AND PROCEDURE—*Concluded*

Cash receipts. The procedure involved in handling the cash of a business, using the term "cash" in the accounting sense, is of considerable importance, since a careless handling may offer tempting opportunities for its misappropriation, with comparatively slight chances of detection. Taking up first the matter of cash receipts, it is apparent that cash is received from several sources and in several forms. Some sources of cash receipts are: (1) cash taken in direct payment for goods sold; (2) cash collected from customers on open account; (3) cash received in payment of notes and drafts; (4) cash from the sale of assets other than merchandise; (5) cash secured by short-time borrowing at the bank; (6) cash secured through long-time borrowing or the sale of securities.

Some of the forms in which cash is received are as follows: (1) checks; (2) currency; (3) postal and express money orders; (4) stamps; (5) bank credits, arising from notes discounted, interest on bank balances, or collections deposited to the firm's account.

All cash received, no matter what its form or source, should be recorded in two places: (1) in the cash book of the business and (2) on the record kept by the business of its relations with the bank. That is to say, *all* the cash receipts of any business should be deposited in the bank. Such deposit should be made, as far as is possible, on the day of receipt. The fact that a record of the firm's bank balance is kept by both the depositor and the bank acts as a check on the correctness of the records of cash transactions.

In a retail establishment the two chief sources of cash receipts are cash sales and collections from customers on account. Receipts of cash from sales are verified by checking the actual cash received with the totals of the cash sales tickets, after which a record of such receipts is made in the cash book and the cash sent in for deposit. The second great source of receipts, remittances through the mail from customers, is also the chief source in a wholesale establishment.

In either a wholesale or a retail business of any considerable size, therefore, the manner in which the incoming mail is handled is of considerable importance. It is well to have one responsible person, preferably a member of the firm or an officer of the company, to take charge of all remittances so received. In the larger retail establishments it is usual for each check to be accompanied by a "remittance slip," which is sometimes the statement of account itself, but generally a coupon which accompanies the statement and which is detached and inclosed with the remittance. Such a remittance slip serves as a basis for recording in the cash journal the receipt of cash from the customer, and also, as will appear later, for posting to his account. After listing, either on an adding-machine tape or on a special form of memorandum blank, all checks or other forms of remittance, this adding-machine tape or other form of memorandum serving the same purpose is sent to the accounting department to be used in making the records. The checks and other forms of cash received are sent to the cashier to be taken care of and deposited. Some variation of this procedure is permissible, but it is not ordinarily desirable that the man who opens the mail, the one who records the receipts in the cash book, and the one who deposits the cash should be the same man, since such a situation offers too great an opportunity for the misappropriation of funds.

At the end of the month, as soon as the monthly statement from the bank is available, it should be possible to check the cash receipts against the bank's record of deposits, and to establish an equality between the total receipts for the month and the total deposits. Amounts placed to the credit of the business on the books of the bank, arising from discounted notes, interest items, or collections, must also be recorded in the cash book as cash receipts, so that such items shall not disturb the equality between receipts and deposits.

Cash disbursements. In the foregoing discussion of cash receipts it was pointed out that by depositing all cash received, a check on the correctness of the entries on the receipts side of the cash book is available in the monthly bank statement. An equally effective check can be maintained on the cash disbursements if every cash disbursement entered in the cash book is effected by means of a check. It is evident, however, that there are many cash disbursements of such a small amount that it would be inconvenient and in fact impracticable

to draw a check for each one of them. This difficulty can be avoided and the general cash-book record still kept in agreement with the bank statement by maintaining what is known as a *petty cash fund.*

Petty cash funds. A petty cash fund is a sum taken out of general cash and set aside for the purpose of making small payments in currency. No matter how it is administered or what method is used in accounting for it, it will be originally established by drawing a check for the amount to be made available for this purpose. An entry will be made in the general cash book debiting petty cash and crediting cash for the amount of the check. From this point on there are two methods in common use for handling the fund.

One of these methods is to carry an account in the ledger with petty cash which will reflect all the fluctuations in the amount of this fund. A petty cash journal would be used which would serve as a medium for posting to all the accounts affected by petty cash expenditures. Such a journal might assume the following form:

PETTY CASH JOURNAL

Date	Explanation	Petty Cash Dr.	Disbursements					Petty Cash Cr.
			Administrative Expenses Dr.	Selling Expenses Dr.	Sundry Accounts			
					Name	Folio	Amount	

The petty cash account, when posted to date, would show the amount in the petty cash fund at the time. Every check drawn to reimburse the fund would be entered in the cash disbursements journal as a debit to petty cash and a credit to cash.

The imprest system for petty cash. The other method, which is probably more generally used in large concerns, is known as the imprest system. When this system is employed, the petty cash book is not ordinarily used as a posting medium but only as a subsidiary

record. When the fund is depleted, the one in charge of the fund prepares a statement in which he lists the expenditures made since the last check was drawn to petty cash and classifies them according to the accounts to be debited. This statement, accompanied by some form of receipt or voucher for each of the expenditures, evidencing their bona fide nature, is submitted to the general cashier or disbursing officer. The latter then draws, or authorizes to be drawn, a check for the amount necessary to bring the fund up to the original sum. The entry in the general cash book is a debit to each of the accounts shown by the petty cash analysis to be chargeable, and a credit to cash. Thus the showing of the petty cash account in the ledger does not change, but remains always at the same figure. The debits to accounts affected by petty cash expenditures are made through the medium of the general cash book, and not through the petty cash book, as under the other method.

Under this method the petty cash book, being only a subsidiary record, may assume whatever form is convenient under the circumstances. A possible form for such a record is shown below:

PETTY CASH BOOK

Date	Explanation	Receipts	Administrative Expenses	Selling Expenses	Miscellaneous

To illustrate this use of the petty cash fund it may be assumed that a fund is established, the amount of which is set at $100. A check is drawn for that amount, petty cash being debited and cash credited. The one in charge of the fund cashes the check and uses the currency for making small cash payments. Sooner or later the fund will be depleted and must be renewed. Assume that the amount remaining in the fund is $14.50, and that of the $85.50 which has been expended, $49.60 is chargeable to administrative expense and the

rest, \$35.90, to selling expense. A statement will be handed to the cashier accounting for the entire amount spent and showing the amount chargeable to each account. He will accordingly draw a check for \$85.50, debiting administrative expense with \$49.60, selling expense with \$35.90, and crediting cash with \$85.50.

It is desirable that such an adjustment should be made at the end of each accounting period, so that the total of expense for the period and of cash actually available at the end of the period may be correctly shown.

Method of handling notes receivable and payable. In case the size or nature of the business is such that notes received are few in number, they may be recorded in the general journal and posted item by item from that book to the notes receivable account. If transactions involving notes receivable occur rather frequently, it may be desirable to introduce into the general journal an additional column headed "Notes Receivable, Dr." This will allow posting to the debit of this account to be made through the footing of this column, rather than by single items. If the business is such that notes receivable are handled with very great frequency, it becomes expedient to make use of a separate notes receivable journal in which to record them.

The discussion of the special notes receivable journal will be deferred to a later point in the course. For the present it is assumed that all such transactions are recorded in the general journal. But the general journal, while it serves as a medium through which the information may be posted into the appropriate accounts, is not well adapted for recording and classifying all the information which should be kept with regard to notes receivable. Any such information desired may be obtained by consulting the notes themselves, but it is more convenient to use a form of supplementary record which may be called a *notes receivable book*, or *notes receivable register*.

A possible form of such a subsidiary record, indicating by its column headings the information for which it makes provision, is shown on page 207.

What has been said with regard to the treatment of notes receivable applies equally well to the treatment of notes payable. In only a few businesses, however, do notes payable occur with sufficient frequency to justify a special notes payable journal. As in the case of notes receivable, it is usually desirable to keep a record of significant

details with regard to each note. This may be accomplished by means of a supplementary record of a nature similar to the one discussed

NOTES RECEIVABLE REGISTER

Date	Number of Note	Name of Maker or Acceptor	Face Value	Time to Maturity	Interest Rate	Amount at Maturity	Date of Maturity	Date of Payment	Discounted		
									Date	By	Amount

under notes receivable. Such a book would be called a notes payable book or notes payable register. A possible form of such a book, showing provision for recording the information which would usually be considered desirable, is shown below:

NOTES PAYABLE REGISTER

Date	Number of Note	Payee	Face Value	Time to Maturity	Interest Rate	Amount at Maturity	Date of Maturity	Date of Payment	Check Number

Use of the trade acceptance. Since the adoption of the Federal Reserve System as the basis of banking operations in the United States, a considerable amount of attention has been given to the use of the *trade acceptance,* and a strong effort has been made by the Federal Reserve Board to induce business men to make greater use of this form of credit. The trade acceptance is a special form of

TRADE ACCEPTANCE

FORM APPROVED BY THE

AMERICAN TRADE ACCEPTANCE COUNCIL

EMBRACING COMMITTEES OF THE

CHAMBER OF COMMERCE OF THE UNITED STATES

AMERICAN BANKERS ASSOCIATION

NATIONAL ASSOCIATION OF CREDIT MEN

______ (CITY OF DRAWER) ______ (DATE) 191__ No.______

ON ______ (DATE OF MATURITY) PAY TO THE ORDER OF OURSELVES

______ (DOLLARS $______)

THE OBLIGATION OF THE ACCEPTOR HEREOF ARISES OUT OF THE PURCHASE OF GOODS FROM THE DRAWER. THE DRAWEE MAY ACCEPT THIS BILL PAYABLE AT ANY BANK, BANKER OR TRUST COMPANY IN THE UNITED STATES WHICH HE MAY DESIGNATE.

TO ______ (NAME OF DRAWEE)

______ (STREET ADDRESS)

______ (CITY OF DRAWEE)

______ (SIGNATURE OF DRAWER)

BY ______

ACCEPTED

DATE ______

PAYABLE AT ______ (NAME OF BANK)

LOCATION OF BANK ______

______ (SIGNATURE OF ACCEPTOR)

BY ______

Trade Acceptance

draft, really differing very little in its essentials from forms of drafts previously illustrated and discussed. It is defined by the Federal Reserve Board as "a bill of exchange drawn by the seller on the purchaser of goods sold, and accepted by such purchaser."

The foregoing illustration shows the form of a trade acceptance which has been approved by the American Trade Acceptance Council. A comparison of this form with the form of accepted draft shown on page 167 will show that the two are essentially the same. The distinguishing point in connection with the trade acceptance, and the one on which the Federal Reserve Board lays great emphasis, is that this form shows on its face that it has arisen out of an actual transfer of goods from the drawer of the draft to the acceptor, while the ordinary acceptance may arise out of any sort of indebtedness or may even represent a form of loan by the acceptor to the drawer. The fact that the trade acceptance is a form of credit instrument reflecting an actual transfer of goods is considered by the Federal Reserve Board to make it a more desirable form of commercial paper and consequently more readily eligible to rediscount by Federal Reserve banks. As a matter of fact, little if any attention seems to be paid this feature by the banks. The eligibility of any piece of commercial paper for discount or rediscount depends mainly on the general reputation of the firms responsible for its payment, and on their financial soundness as reflected in their accounting reports.

An illustration will show how the trade acceptance may be used. Hibbard, Spencer, Bartlett & Company, of Chicago, sell the Central Supply Company, of Indianapolis, merchandise to the amount of $4,000. The terms of the sale are net thirty days, with an agreement on the part of the Central Supply Company to accept a thirty-day draft. Hibbard, Spencer, Bartlett & Company proceed to draw upon them at thirty days, using the trade acceptance form of draft. They send this draft to the Central Supply Company, who accept and return it. Hibbard, Spencer, Bartlett & Company may retain the draft and collect the amount of its face at maturity, or they may discount it at their bank. In case it is discounted, the Chicago bank will credit Hibbard, Spencer, Bartlett & Company with the face of the draft less the discount. The Chicago bank may hold it till maturity, at which time it will be sent to their correspondent bank in Indianapolis

for collection, or, as was suggested above, the Chicago bank, if a member of the Federal Reserve System, may rediscount such paper with the Federal Reserve Bank of Chicago, thus securing funds or credit with that institution.

Accounting for trade acceptances. This illustration may also be used to explain the accounting involved in connection with the trade acceptance. When Hibbard, Spencer, Bartlett & Company ship the goods to the Central Supply Company, the entry on the books of the seller will be a debit to accounts receivable and a credit to sales. When they receive the accepted draft the entry will be debit to notes receivable and a credit to accounts receivable. If, on the other hand, they discount it before maturity, the entry will be a debit to cash for the proceeds, to discount or interest for the amount of the discount deducted by the bank, and a credit to notes receivable or notes receivable discounted. In the same way a time draft drawn against a concern and accepted by it is treated in its accounts as notes payable. Thus trade acceptances and other accepted time drafts receivable and payable are included in the same accounts as notes receivable and payable, since an accepted draft is legally of the same import as a promissory note.

QUESTIONS FOR CLASS DISCUSSION

1. The Wilson Manufacturing Company manufactures shoes, which they sell to jobbers. They sell for cash, on open account, and for trade acceptances. How many kinds of transactions might occur in such a concern which would result in debits to cash?
2. How many kinds of transactions can you think of as occurring in connection with the operations of this business which would result in cash being credited?
3. You are being considered for the position of chief accountant in a large retail store and are asked to outline a scheme for handling the cash in that establishment. What questions would you ask before giving your answer? Outline in general terms a plan for handling cash which you think would apply in the ordinary business of this nature. What provisions, if any, would your plan make for guarding against the embezzlement of funds by members of the organization?
4. What do you consider the most desirable form of handling petty cash disbursements? Why do you consider it the *most* desirable plan?

5. What is the purpose of a notes receivable register? Under what circumstances would you recommend its use? A notes payable register?
6. Define a trade acceptance. Describe its use, giving an illustration. What are the advantages in the use of this form of credit? The disadvantages?
7. Which do you consider the more desirable form of credit, the trade acceptance or the open account? Why?
8. Describe the adjustment which you would make at the end of the fiscal period in order to have the petty cash agree with the amount shown for this item on the balance sheet.
9. Should you normally expect the cash balance shown by your records to agree with that shown by the bank's records on the same date? Why or why not? If not, describe the procedure which you would follow in order to reconcile the two amounts.

REFERENCES FOR FURTHER STUDY

Mitchell, T. W., *Accounting Principles*, chap. xv.

Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chaps. xxxv and xxxvii.

Esquerré, Paul Joseph, *Applied Theory of Accounts*, chaps. xiii and xv.

CHAPTER XIX

BOOKS OF ORIGINAL ENTRY—SALES AND PURCHASES RECORD

Purpose of books of original entry. In chapter xi it was pointed out that it is inexpedient to enter the record of a business transaction directly into the ledger accounts affected, and that it is customary to make a preliminary record of the transaction as a whole, analyzed according to the accounts affected, in some book of original entry. This preliminary record shows the debits and credits involved, and serves as a medium for posting them into the ledger. Besides this, it may provide for the recording of certain significant facts concerning each transaction, such as could not be conveniently entered in the ledger. It may also have a very important use in facilitating the analysis of certain groups of transactions. This last point will be developed further in the subsequent discussion of particular types of such records. The form which the books of original entry will assume will vary with the type of transaction which the particular book is intended to record, and with the classification which it seems desirable to make of the financial facts arising from such transactions. It follows that there can be no fixed form for any book of original entry. The correct form in each case is the one which best answers the purpose for which it is intended.

Subdivisions of the journal. Whenever a given type of transactions occurs in a business with sufficient frequency, it becomes desirable that a special journal should be devoted to that particular class of transactions. Thus it is usual to find a separate journal for the recording of each of the following types of transactions: purchases, sales, cash receipts, cash disbursements. In a business where it is the usual thing to receive a considerable number of notes or trade acceptances from customers, a special notes receivable journal would be desirable as an additional form of record. In the same way, if a business frequently gives notes or trade acceptances to its creditors, a notes payable journal may become worth while. Sales returned by

customers and allowances made to satisfy claims of customers may easily become important enough to justify a sales returns and allowances journal, and the same may readily become true of purchase returns and allowances. Any other type of transaction which occurs frequently enough may call for a special journal, for purposes of analysis and for convenience in posting.

The use of the general journal, and of simple forms of the purchases journal, sales journal, and cash journals, has been previously explained. Some of the more complex forms of the commonly used books of original entry will now be considered.

Use of special columns in books of original entry. Probably the most important advantage of the use of special journals is that they make possible the analysis of transactions into certain definite classes. There have been mentioned in this chapter the following classes: (1) purchases, (2) sales, (3) cash receipts, (4) cash disbursements, (5) notes receivable transactions, (6) notes payable transactions, (7) sales returns and allowances, and (8) purchase returns and allowances. Still other special classes might be mentioned, in addition to the remaining group of miscellaneous transactions. But if a special journal should be devoted to each of the types of entries indicated and all remaining transactions entered in the general journal, there might well remain a need for still further classification within some or all of these special groups.

To illustrate this, the case of cash receipts may be used. The simple form of cash journal shown in a previous chapter provides a record for all cash received. But it may be desired to classify cash receipts still further with regard to their sources. Thus in a retail establishment the chief sources of cash receipts would be: (1) the payment by customers of their accounts, (2) cash sales, and (3) miscellaneous receipts, which might include payment of occasional notes receivable, interest on such notes, sale of fixed assets, and other items.

A classification of cash receipts along these lines might be obtained by having three journals for cash receipts, and recording receipts from each of the three sources in a separate journal. This method would prove undesirable, however, for the reason that it is desirable to keep in one journal a record of all cash receipts, since this facilitates the auditing of cash receipts and the ascertainment of the cash balance. A satisfactory solution to this problem is to introduce into the cash

receipts journal three special columns, recording the receipts from each of the three sources in a separate column. The total of each column will then indicate the total amount of cash received from the source in question. In addition to these three special columns, still another column would be used to show the total of cash receipts from all sources. Assuming a retail business in which customers are not allowed any cash discounts, such a journal might appear as follows:

CASH RECEIPTS

Date	Explanation	Gen. L.F.	Accts. Rec. F.	Sundry Accts. Cr.	Accts. Rec. Cr.	Sales Cr.	Cash Dr.
May 1	Balance						2,420 50
2	Henry Wilson, on acct.				50 00		50 00
2	Cash sales for day					90 00	90 00
3	Notes receiv., James Thompson			100 00			100 00
3	Int. on notes rec., James Thompson			2 00			2 00
3	John Seely, on acct.				35 00		35 00
3	Cash sales for day					110 00	110 00

The foregoing discussion of the cash receipts journal illustrates the principles involved in the use of special columns in the books of original entry. Just as the types of transactions which occur most frequently are taken out of the general journal and recorded in special journals, so the subdivisions within each general type of transaction may be designated by the use of special columns within the special journals. In the laboratory exercises which are given the student will have occasion to use various special columns in the books of original entry, as the nature of the business transactions to be dealt with becomes more varied and complicated.

The recording of sales. It is not a matter of great importance whether sales or purchases is discussed first. The reason for taking up sales first is that in any mercantile business the fundamental classification which will be made of purchases and of purchase returns and allowances, as well as of sales returns and allowances, depends to some extent on the basis taken for the classification of sales. The sales result in the income which makes it possible to continue purchasing goods. Also in a mercantile business merchandise is purchased only for the purpose of resale to customers, and any plans for

future purchasing must be made on the basis of an estimate of future sales. These facts make it desirable that the actual sales for a given period and the actual purchases for the same period should be classified on a common basis.

A brief discussion of the routine involved in handling sales transactions was given in chapter xvii, so that the present discussion may be devoted entirely to the analysis and recording of such transactions. The analysis of a sales transaction into its debits and credits is very simple. In every case value is received by the business in some form, whether cash, notes receivable, or other forms of claim against the customer. The debit therefore will be to the account or accounts representing the form of value which is received, and the credit to a sales account. In a business which sold only on open account and made no attempt to classify the commodities sold, the form of record required would be very simple. Such a sales journal might appear as follows:

SALES JOURNAL

Date		L.F.	Account Debited	Address	Terms	Invoice Number	Amount	
June	1		William Henderson	Monee, Ill.	2/10/60	132	455	00

Here there is only one form of asset received and only one sales account to be credited, so that a single column is sufficient. The footing of this column is a debit to accounts receivable and a credit to sales.

Cash sales. If in such a business it became necessary to record sales for cash as well as sales on account, it would be possible to do this by means of a sales column in the cash receipts journal, as shown on page 214. The posting to sales account could be accomplished satisfactorily through the footing of this column. However, the sales journal would no longer show the total of sales, and would also fail to show an analysis of sales according to credit terms, which in such a case might well be desired. The sales journal may be made to show the essential information with regard to sales by the introduction of extra columns as follows:

SALES JOURNAL

Date		Account Debited	Address	Terms	Invoice Number	Accts. Rec. Dr.	Cash Dr.	Sales Cr.
June	1	Joseph Lipman	Keokuk, Iowa	2/10/60	145	348 50		348 50
	2	Thompson Bros.	Hammond, Ind.		146		125 00	125 00

The "Cash Dr." column would not be posted, since all cash received must be recorded in the cash receipts journal, and this debit is already included in the total debit to cash. The cash column in the sales journal is there only for purposes of analysis. In the same way the "Sales Cr." column in the cash receipts journal would not be posted when this form of sales journal is used, but would be used only as an aid to the analysis of cash receipts.

Analysis of sales by departments. It will be found that in most businesses of any considerable size, whether wholesale or retail, the commodities sold are assigned on some basis or other to *departments.* The management desires such information as will enable it to compare results obtained in the different departments, and also such information as will serve as a basis of planning future business for each department. This means that information concerning sales, sales deductions, and the cost of goods sold must be analyzed by departments. Such an analysis of sales can easily be provided in the sales journal. Thus, assuming a wholesale business with three departments, which may be called A, B, and C, and assuming that this concern sells goods on open account and for cash, a sales journal which would provide the desired analysis might have the following form:

SALES JOURNAL

Date		Invoice	Sold to	Address	Terms	L.F.	Accts. Rec. Dr.	Cash Dr.	Sales Dept. A	Sales Dept. B	Sales Dept. C
July	1	153	J. Dole	Manteno, Ill.	n/30		400 00		150 00	100 00	150 00
		154	Cent. Hardware Co.	Chicago				300 00	100 00		200 00

The foregoing illustration being for a wholesale business, each invoice is entered as a separate item. Where an invoice includes sales from more than one department, a separate sheet would usually be devoted to the sales of each department affected. This facilitates its analysis when it is entered by the accounting department in the sales journal.

Recording retail sales. In recording sales in a retail establishment, where they are likely to be much greater in number, it is not usual to enter each sale as a separate item. The sales tickets within each department would be collected at the end of the day's business. Cash sales, credit sales, C.O.D. sales, instalment sales, etc., would each have a distinctive color of ticket. Each of these classes would be grouped and totaled, and the sales for the day would then be summarized and entered in the sales journal. Assuming a retail business with only three departments, such a form of sales journal might appear as follows:

SALES JOURNAL

Date		Cash	C.O.D.	Accounts Receivable		Sales Dept. A	Sales Dept. B	Sales Dept. C	Total Sales
				City	Country				
May	1	475 00	125 00	520 00	210 00	525 00	410 00	395 00	1,330 00

In the illustration above it is also assumed that customers' accounts are divided into two groups, city customers and out-of-town customers. The column for "Total Sales" is usually not posted, the credits being ordinarily made to the departmental sales accounts instead. The information furnished by this "total" column, however, is usually considered to be of sufficient interest to justify the use of the column.

Sales deductions. In nearly every business the total credit to sales, which represents the total of the invoices or sales tickets for the particular department or for the business as a whole, is subject to certain deductions. Some goods will be returned as unsatisfactory. Allowances or rebates may have to be given the customer on account of the failure of goods sold to give satisfactory service. Such occurrences represent deductions from the item of gross revenue from sales, the amount of which revenue is shown by the sales accounts.

It would be possible to ascertain the amount of net sales for each department by debiting any such deductions directly to the sales account to which they belong. But the sales reports will be much more useful as an aid to the planning of future business if such deductions are shown separately instead of being hidden in the sales accounts. Separate accounts should therefore be carried in the ledger for sales deductions, and these accounts must provide the means of classifying such deductions on the same basis used for the classification of sales. Sales returns and allowances are the most common forms of sales deductions, and will be considered here for purposes of illustration.

Sales return and allowances journal. The nature of sales allowances really differs somewhat from that of sales returns, and if the former become considerable in amount, they should be recorded as a separate item. It is usual, however, for all deductions from these two sources to be carried in a single account entitled "Sales Returns and Allowances." Whatever classification is maintained for sales, the same will be required for sales returns and allowances. Thus if the wholesale business whose sales journal was shown on page 216 finds that sales returns and allowances occur with sufficient frequency to justify a separate journal, this journal would take the following form:

SALES RETURNS AND ALLOWANCES JOURNAL

Date		Invoice Number	Acct. Credited	Address	L. F.	Accts. Rec. Cr.	Cash Cr.	R. and A. Dept. A	R. and A. Dept B	R. and A. Dept. C
July	2	149	Thos. Moran	Niles, Mich.		55 00		55 00		
	5	153	J. Dole	Manteno, Ill.		40 00			15 00	25 00

A retail business whose sales are classified on the basis indicated in the form of sales journal illustrated on page 217 will probably require a sales returns and allowances journal similar to the following form:

SALES RETURNS AND ALLOWANCES JOURNAL

Date		Cash Cr.	C.O.D.	Accounts Receivable		R. and A Dept. A	R. and A Dept. B	R. and A Dept. C	Total R. and A.
				City	Country				
May	1	45 00	30 00	60 00	125 00	75 00	90 00	95 00	260 00

Recording purchases. A consideration of purchases in the broad meaning of the term would include every form of purchase made by the business, whether of salable merchandise, raw materials for manufacture, supplies, or services such as rent, labor, and the like. It is desirable to confine the present discussion to the recording of purchases of salable merchandise. The routine of such purchases has been briefly considered in chapter xvii, and the form of the record is now to be taken up.

In most businesses purchases of merchandise are generally made on credit. The account to be credited is therefore Accounts Payable. This is so nearly the rule that the typical business concern will enter the occasional exception as though it were a purchase on account, and then make a second entry to show the debit to Accounts Payable and the credit to Cash, Notes Payable, or whatever other account may be affected.

The analysis of the debits involved in a purchase transaction will usually depend on the classification that is made of sales in that particular business, since, as has been previously pointed out, the accounts showing cost of goods sold must correspond in classification to the accounts with sales. In a business which maintained no classification of sales the purchases journal might have the following form:

PURCHASES JOURNAL

Date		L.F.	Account Credited	Address	Terms	Invoice Number	Amount
June	1		Wilson Bros.	Chicago, Ill.	2/10/n/60	45	457 50

The footing of the "Amount" column is a debit to purchases and a credit to accounts payable. All purchase invoices are entered in this journal and filed according to whatever system is used in the business.

Departmental analysis in the purchases journal. In a business which is organized into departments according to the commodities handled, the purchases journal must show the same analysis as does the sales journal. Thus, assuming a business which may be either wholesale or retail, but with three departments, the following form of purchases journal may be used:

PURCHASES JOURNAL

Date		L.F.	Account Credited	Address	Terms	Invoice No.	Accounts Payable Cr.	Purchases Dept. A	Purchases Dept. B	Purchases Dept. C	Total Purchases
June	1		Cobb Mfg. Co.	St. Paul	2/10/60	122	675 00	675 00			675 00
	6		The Buda Co.	Chicago	2/10/30	123	450 00			450 00	450 00
	8		W. F. Hebard Co.	Chicago	2/10/60	124	525 00		525 00		525 00

It might be considered worth while to introduce still other columns into the purchases journal. Thus if the business made a practice of giving notes or trade acceptances in payment for goods, as well as purchasing on open account, an additional column headed "Notes Payable, Cr." might well be introduced, just to the right of the column headed "Accounts Payable, Cr." Or the column headed "Terms" might be followed by two columns, headed respectively "When Due" and "When Paid." This would make the purchases record show the date when each invoice must be paid in order to take advantage of the discount offered, and the date when each was paid, if it had been paid.

It hardly seems necessary to attempt to illustrate various possible forms of the purchases journal. The foregoing illustrations and discussion should have furnished the student with a working knowledge of the principles involved in designing such records.

Purchases other than merchandise. All the forms of purchase records just illustrated provide only for recording the purchase of

salable merchandise. Other purchases, such as items of equipment, supplies, and services, would be recorded in the cash book if purchased for cash, and when purchased on credit would be recorded either in the general journal or in some special journal designed for that purpose. It is possible to have a single purchases journal in which all purchases on account are recorded. This would necessitate only the addition of other columns to provide for debiting other than merchandise accounts for other types of purchases. The discussion of such forms of journals as would be necessitated by handling other than merchandise purchases in the purchases journal is best deferred to a later point in the study of accounting.

Purchase deductions. In connection with purchases, as with sales, there are certain deductions to be considered. An analysis of these deductions must be maintained along the same lines on which sales and purchases are analyzed. The classification of purchase returns and allowances, therefore, will be similar to that of the merchandise purchases, and the form of journal used to record them will be determined by the form of the purchases journal. A single illustration should serve to make this matter clear. Taking the form of purchases journal shown on page 220, the purchase returns and allowances journal which would be used to correspond to the analysis shown there would appear as follows:

PURCHASE RETURNS AND ALLOWANCES JOURNAL

Date		L.F.	Account Debited	Address	Invoice Number	Accounts Payable Dr.	R. and A. Dept. A	R. and A. Dept. B	R. and A. Dept. C
Jan.	4		Cobb Mfg. Co.	St. Paul	122	50 00	50 00		

This form of journal should serve to indicate the necessary correspondence between the analysis of purchases and that of purchase deductions, and the student should not meet with any appreciable difficulty in designing a purchase returns and allowances journal after he has once determined upon the form to be used for the purchases journal.

QUESTIONS FOR CLASS DISCUSSION

1. What purposes are served by the books of original entry?
2. You are asked to design an accounting system for the J. B. Saunders Company, a wholesale hardware business. What information should you obtain before determining what books of original entry to use?
3. From your present general knowledge of the nature of the wholesale hardware business, what books of original entry do you think you might use for recording the transactions of such a business?
4. What purposes are served by the use of special columns in the books of original entry?
5. Assume that the J. B. Saunders Company is organized with four departments, which may be indicated as Departments A, B, C, and D, and that sales are made on open account and for trade acceptances. List the columns which you would use in the sales journal which you would design for this business; in the sales returns and allowances journal.
6. What columns would you suggest for the sales journal of the F. C. Miller Company, a retail clothing business with four departments, which sells for cash and on monthly account? Describe the routine which would be followed in making entries in this journal.
7. List the columns which would be needed in the sales returns and allowances journal of the Miller Company, and describe the routine which would be followed in connection with entries of this type.
8. What differences, if any, would you make between the form of purchases journal to be used for the Saunders Company and that used by the Miller Company? List the columns which you would use for each of them.
9. List the columns which you would use in the purchase returns and allowances journal of each of these businesses.
10. In view of the recommendations which you have made for the purchases, sales, purchase returns and allowances, and sales returns and allowances journals of the Saunders Company, list the trading accounts which would be maintained in the ledger of that business.
11. What difference, if any, would there be in the trading accounts of the two businesses?

REFERENCES FOR FURTHER STUDY

Esquerré, Paul-Joseph, *Applied Theory of Accounts*, chap. viii.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xxxix.
Mitchell, T. W., *Accounting Principles*, chap. vii.

CHAPTER XX

BOOKS OF ORIGINAL ENTRY—THE CASH JOURNAL

The cash book. The nature of the record that must be kept with cash receipts and cash disbursements was explained in chapter xii, where certain very simple forms of records with cash were suggested. It was there explained that the two journals, one for receipts and the other for disbursements, together constitute what is known as the *cash book.* By comparing the total debits to cash on the one side with the total credits to cash on the other side, it is possible at any time to ascertain the balance of available cash. In the preceding chapter the desirability of maintaining an analysis of cash receipts and of cash disbursements was indicated, and the use of special columns in the cash journals for this purpose was illustrated. In the present chapter the possibilities of such analysis will be considered further, as applied to both receipts and disbursements, and the use of special columns for this purpose will be given further discussion.

In chapter xviii the business procedure and routine involved in the handling of cash transactions was discussed. A knowledge of the subject-matter of that chapter will therefore be assumed at this point, and the present discussion confined to the matter of recording these transactions.

Cash receipts—analysis. In recording transactions involving cash receipts it might seem that the cash account is the only one to be debited. Further consideration, however, reveals the fact that the receipt of cash may involve a debit to some other account, along with a debit to Cash. The most common instance of this is in the case of cash discount on sales, which occurs regularly in wholesale businesses, and in certain departments of some retail businesses. Thus in selling goods at wholesale, they are usually invoiced to the customer at a certain price, payable within a fixed time (usually thirty or sixty days), but subject to discount if paid within a shorter period, generally ten days from the date of the invoice. In such a case, when the customer

remits within ten days, the amount of the check will be the total of the invoice less the discount allowed. In recording the receipt of such a remittance, the customer must be dedited with the amount of the invoice, while Cash can be debited only for the amount of the check. The difference is a debit to Cash Discount on Sales. It will therefore be necessary to have a special column introduced into the cash receipts journal to provide for debits to this account.

The nature of the account with cash discount on sales, and its treatment in the reports, will be discussed in a later chapter.

A somewhat similar case occurs when a note is discounted at the bank. Assuming that a business borrows at the bank, giving its own note for $1,000, due in sixty days, without interest, and that the discount rate is 6 per cent, the journalization of the transaction involves a credit to Notes Payable for $1,000, a debit to Cash for $990, and $10 debit to Interest on Notes Payable. This type of transaction is much less frequent than that involving cash discount on sales, but must be provided for in some manner in the books of original entry. It is possible to divide the transaction into two parts, with an entry in the cash receipts journal debiting Cash for $990 and crediting Notes Payable for the same amount, and to make another entry in the general journal, debiting Interest on Notes Payable for $10 and crediting Notes Payable. Such a transaction may be recorded in the cash book by an entry in the cash receipts journal debiting Cash for $1,000 and crediting Notes Payable for that amount, with another entry in the cash disbursements journal debiting Interest and crediting Cash for $10, the amount of the interest. Or it may all be recorded in the cash receipts journal by having a special column for debits to Interest. Such a column would be hardly worth while if transactions of this type are very infrequent.

Cash receipts—credits. The analysis of cash receipts according to their sources may involve several accounts, although not so great a number as will usually be involved in an analysis of the cash disbursements. Some idea of the accounts that may be credited when cash is received may be gained from a consideration of the sources from which cash may be received. These may be listed as follows: (1) receipts from cash sales; (2) receipts from customers in payment of open accounts; (3) receipts in payment of notes receivable;

(4) receipts from discounting notes receivable at the bank; (5) receipts from additional investment in the business by the owners (sole proprietor, partners, or stockholders); (6) receipts from interest on notes receivable or on bank balances; (7) receipts from borrowing on short-time notes payable (from the bank); (8) receipts from borrowing on long-time obligations; (9) receipts from the sale of fixed assets; (10) receipts from the income on long-time investments held by the business; (11) miscellaneous (sales of waste, rentals of equipment, etc.).

An examination of this list of possible sources of receipts shows that there may be a number of accounts to be credited for cash receipts. But it is also apparent that only a few of these accounts will be credited with any considerable degree of frequency. In planning the form to be used for the cash receipts journal, then, special columns should be provided to take care of the credits to those accounts which occur with the greatest frequency, leaving the credits to accounts which occur less often to be entered in the general credit column, which may be headed "Sundry Accounts, Cr." Credits entered in this column could not be posted through the footing of the column, but would be posted item by item to the credit of the proper accounts. In making a complete analysis of cash receipts for a given period, it would be necessary to prepare a separate schedule showing further analysis of the terms entered in this general column, in such detail as might be considered desirable. The information shown by this schedule would then be embodied in the general analysis of total cash receipts.

Illustration of cash receipts journal. In the preceding chapter a simple form of cash receipts journal was shown, illustrating the use of special columns. The form that will prove desirable in any particular business depends on the accounts that are affected by cash receipts, and the frequency with which cash receipts from each particular source occur. The form of cash receipts journal which appears below provides special columns for the analysis of receipts according to the more usual sources. All other credits are entered in a general column and posted item by item to the ledger account. If further analysis of receipts is desired for any purpose, it may be obtained by making a recapitulation of this general column.

CASH RECEIPTS

Date		Account Credited	L.F. Gen.	L.F. Accounts Receivable	Sundry Accounts Cr.	Accounts Receivable Cr.	Notes Receivable Cr.	Sales Cr.	Sales Discount Dr.	Interest Dr.	Net Cash Dr.
Jan.	2	Balance									350 75
	2	H. B. Johnson, Invoice No. 92				200 00			4 00		196 00
	2	Cash sales for day						150 00			150 00
	3	Notes receivable, J. Dole					300 00				300 00
	3	Notes payable, sixty-day note discount at bank			500 00					5 00	495 00

It should not be difficult for the student to understand the purpose of the money columns in the form of journal shown on page 226. It is probable, however, that he will not fully understand the process of posting or the use in this connection of the two folio columns. These points may well be passed over for the purpose of the present chapter. They will be fully explained and illustrated in the next chapter. For the present it is enough if the student understands how the forms here shown are used for purpose of analysis.

Analysis of cash disbursements—credits. Every entry made in the cash disbursements journal is supposed to involve a credit to cash, and actually does involve such a credit. But one type of cash disbursement also involves credits to another account as well. This is the account with cash discount on purchases. The nature of the transactions which result in a debit to Cash Discount on Sales was explained in the discussion of the recording of cash receipts. From the point of view of the individual or firm who pays for the goods and takes the discount, this is cash discount on purchases. Thus when we pay an invoice upon which a cash discount is allowed, remitting within the time limit and deducting the discount, the entry is a debit to Accounts Payable for the amount of the invoice, a credit to Cash for the amount of the check, and a credit to Cash Discount on Purchases for the amount deducted. The cash disbursements journal, therefore, will usually provide two credit columns—one for Cash, and the other for Cash Discount on Purchases.

Analysis of cash disbursements—debits. Cash disbursements may involve debits to a number of different accounts, since expenditures of cash may be chargeable to practically any expense account or asset account in the ledger. The greater number of these accounts will not be affected very frequently, however, and there are usually a very few accounts which are charged through the cash disbursements journal often enough to justify carrying special columns for them. The nature of the business and the frequency with which certain accounts are affected by cash disbursements will determine what special columns should be used in this journal. The one which usually occurs with the greatest regularity is Accounts Payable. This account will practically always require a special column. It is not usual for any entry affecting purchases account to be made in the

cash book, since purchases are generally classified in the purchases journal and therefore entered in that book and posted from it. Cash purchases of merchandise are very rare in most businesses, and where they do occur are usually entered as purchases on account, accounts payable being credited through the purchases journal. The payment is then recorded in the cash disbursements journal as a credit to Cash and a debit to Accounts Payable.

If the business makes a practice of giving notes payable to trade creditors, so that such notes occur rather frequently, a special column for recording them may be provided in the cash disbursements journal. It may be said, however, that there are not very many businesses where the notes payable are numerous enough to justify this. Other special columns may be provided for debits to any expense accounts which are affected frequently enough to make such columns worth while. The debits for which no special columns are provided will be entered in a general column, which is usually headed "Sundry Accounts, Dr." or with some similar caption, and these debits will be posted to the ledger, item by item. A complete analysis of cash disbursements would require that a recapitulation be made of the items in this general column.

Illustrations of the cash disbursements journal. It has been explained that the recording of cash requires the use of two journals, one for receipts and one for disbursements, and that the two together constitute the *cash book.* The amount of analysis provided for in each of these journals will depend on the size and complexity of the business. A very simple form of cash book for a small wholesale business which takes discounts on purchases and allows discounts on sales might make use of the following columns:

CASH RECEIPTS

Date		L.F.	Account Credited	Explanation	Accounts Receivable Cr.		Sales Discount Dr.		Cash Dr.	
Jan.	1		Balance	On hand					2,500	00
	2		J. Henry	Invoice No. 43	200	00	4	00	196	00

CASH DISBURSEMENTS

Date		L.F.	Account Debited	Explanation	Accounts Payable Dr.	Purchases Discount Cr.	Cash Cr.
Jan.	2		Rent	For January			100 00
	3		James Bros.	Invoice No. 23	500 00	10 00	490 00

The relation between the two sides of the cash book, which is most apparent when it has been balanced and ruled up at the end of the period, is not clearly shown in the foregoing illustration. For a better illustration of this relationship, the student is referred to page 245 in the following chapter.

A cash book for a somewhat larger business, providing more analysis than the form just shown, might combine the form of cash receipts journal shown on page 214 with the form of cash disbursements journal shown below:

CASH DISBURSEMENTS

Date		Explanation	L.F. Gen.	L.F. Accounts Payable	Sundry Accounts Dr.	Accounts Payable Dr.	Office Expenses Dr.	Purchases Discount Cr.	Cash Cr.
Jan.	2	Rent for January			125 00				125 00
	3	J. E. Williams, Invoice No. 51				750 00		15 00	735 00
	4	Light bill for January					12 75		12 75
	4	Office equipment—typewriter			100 00				100 00
	5	Jones and Co., Invoice No. 53				600 00		12 00	588 00

The illustrations offered in this chapter[1] give the student a view of the ways in which the cash book may be used for purposes of analysis.

[1] It is not considered worth while to illustrate forms of notes journals at this point. The laboratory work for this elementary presentation does not involve the use of such journals, and the ordinary business is not likely to find it worth while to use them.

In the following chapter a somewhat fuller discussion is given of the manner in which transactions are to be entered in such a record, and the manner of posting from them to the ledger accounts.

QUESTIONS FOR CLASS DISCUSSION

1. What accounts besides cash may be debited as a result of transactions involving cash receipts? What methods may be employed in entering such debits in the books of original entry? What will determine the relative desirability of these methods in a given case?
2. What accounts besides cash may be credited as a result of transactions involving cash disbursements? What methods may be employed for the entry of such credits? What will determine the relative desirability of these methods in a given case?
3. The J. B. Saunders Company, mentioned in the questions at the end of the preceding chapter, sells goods on open account, all such accounts being payable in sixty days, and allows its customers to deduct a 2 per cent discount if the invoice is paid for within ten days. It occasionally borrows money from the bank on its notes, and sometimes obtains funds from the bank by discounting the notes of its customers. List all the sources from which you think this company might receive cash. Which of these sources of cash receipts do you think would require special columns in the cash receipts journal?
4. The F. C. Miller Company, also mentioned in the questions at the end of the preceding chapter, does not allow cash discounts to customers, and does not make a practice of taking the notes of customers. List as many possible sources of cash receipts as you can think of for this business. Which of these would require special columns in the cash receipts journal?
5. Making any assumptions you may consider necessary and stating what assumptions you do make, design a cash book which you think would serve for the use of the J. B. Saunders Company.
6. Follow the same instructions and design a cash book for the F. C. Miller Company.
7. Comment on any differences in the forms prepared under Questions 5 and 6. Give reasons for such differences.

REFERENCES FOR FURTHER STUDY

Esquerré, Paul-Joseph, *Applied Theory of Accounts*, chaps. viii and xiii.
Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xxi.

LABORATORY EXERCISE NO. 32

W. C. Harvey has decided to go into the retail hardware business. He engages you to instal a suitable system of accounting for his business, to oversee the daily work of the bookkeeper until you are sure that the latter understands the use of the accounts, and to prepare reports monthly until you are satisfied that these can be prepared properly by the bookkeeper. After some discussion of Mr. Harvey's plans for the business, you have drawn up the following as a tentative outline of the accounts that will be needed for the preparation of the accounting reports.

1\. Asset accounts
- 11\. Current asset accounts
  - 111\. Cash
  - 112\. Accounts Receivable (individual accounts)
  - 113\. Notes Receivable
    - 1103\. Reserve for Bad Debts[1]
  - 114\. Merchandise Inventory
  - 115\. Accrued Interest Receivable
- 12\. Deferred charges accounts
  - 121\. Prepaid Insurance
  - 122\. Other Prepaid Expense
- 13\. Fixed assets accounts
  - 131\. Delivery Equipment
    - 1301\. Reserve for Depreciation of Delivery Equipment
  - 132\. Store and Office Equipment
    - 1302\. Reserve for Depreciation of Store and Office Equipment

2\. Liability accounts
- 21\. Current liability accounts
  - 211\. Accounts Payable (individual accounts)
  - 212\. Notes Payable—Trade Creditors
  - 213\. Notes Payable—Banks
  - 214\. Expense Accrued

3\. Proprietorship accounts
- 31\. W. C. Harvey, Capital
- 32\. W. C. Harvey, Personal

[1] To indicate that certain accounts are of an opposite nature to those with which they are included, and are to be considered "valuation" or deduction accounts, a cipher is introduced before the final integer in the number indicating such an account.

4. Income accounts
    41. Operating income accounts
        411. Merchandise Sales
            4101. Sales Returns and Allowances
    42. Other income accounts
        421. Interest on Notes Receivable
        422. Cash Discount on Purchases
5. Expense accounts
    51. Operating expense accounts
        511. Purchases
            5101. Purchase Returns and Allowances
        512. Selling expense accounts
            5121. Sales Salaries
            5122. Advertising
            5123. Delivery Expense
            5124. Other Selling Expense
        513. General and administrative expense accounts
            5131. Rent
            5132. Heat and Light
            5133. Office Salaries
            5134. Insurance and Taxes
            5135. Other Office Expense
    52. Other deductions from income
        521. Interest on Notes Payable.

For the present, books of original entry to be used are (1) a journal, (2) a cash book, (3) a purchases journal, and (4) a sales journal. (For the forms of these books see illustrations in the chapter on the use of special columns in books of original entry.) All cash transactions are to be entered in the cash book. All sales on account are to be entered in the sales journal. All purchases of merchandise on account are to be entered in the purchases journal. Other purchases on account are to be entered in the journal. It is anticipated that some sales may be made of farm equipment for which notes will be taken. In such cases the procedure will be to record the sale in the sales journal as a sale on account, and then to record the receipt of the note in the journal as a separate transaction, debiting notes receivable and crediting the customer. Unless otherwise specified in the description of the transaction, sales and purchases are assumed to be made on account.

For the purchases journal and the sales journal, journal ruled paper may be used. For the cash book, however, the special columnar journal form will be required.

In this exercise controlling accounts (explained in chapter xxi) will be carried in the ledger for accounts receivable and accounts payable. The accounts with individual customers and creditors should be carried on separate sheets of ledger paper, representing the customers' ledger and creditors' ledger. These accounts may be carried three to the page. The general ledger accounts may be carried two to the page.

It is desirable that the accounts with individual customers and creditors should be kept posted up to date day by day, since the proper entry for some of the transactions will require a knowledge of the standing of certain individual accounts in these ledgers.

Transactions for April

April 1

W. C. Harvey enters the retail hardware business, investing cash, $6,000.00. He rents a store building for $125.00 a month, paying the first month's rent in advance. He purchases a ladder, scales, and other equipment necessary for the store, amounting to $250.00, and gives his check for the amount.

April 2

Buys of Western Supply Co. a typewriter, table desk, and office chairs, for $175.00, terms net cash in fifteen days. Pays cash for stationery, stamps, and other office supplies, $50.00. Receives invoice of hardware from the W. D. Allen Co., amount $5,000.00, terms 2/10/n/60. Cash sales for the day, $53.65.

April 3

Pays insurance premium on stock for one year, $36.00. Sells Peter Henderson a stove, $50.00, on account. Sells Adam Jones builders' supplies, $75.00, on account. Cash sales, $45.00.

April 4

Buys for cash a used Ford truck for hauling and for making deliveries, $350.00. Receives invoice of shipment from Barrett-Christie Hardware Co., Chicago, $175.00, 2/10/n/60. Sells Andrew Anderson on account, $45.00. Sells Jacob Gunderson builders' hardware, $160.00, on account. Cash sales, $68.00.

April 5

Pays for repairing car and for gasoline and supplies, $45.00. Sells Charles Robinson on account, $35.00. Pays postage, $20.00. Cash sales, $58.00.

April 6

Pays bookkeeper, $20.00; clerk, $25.00; driver, $25.00. Withdraws for personal use, $35.00.

April 8

Buys five tons of coal, $55.00, paying cash. Sells William Gibson $48.00, on account. Cash sales, $62.50.

April 9

Sells Jacob Gunderson $42.00, on account. Adam Jones pays for goods sold him on April 3. Cash sales, $71.00.

April 10

Sells James Freeman builders' hardware, $200.00, taking his sixty-day note with interest at 6 per cent in payment. Borrows $2,000.00 from the Merchants Bank, on a ninety-day note, with interest at 6 per cent. Cash sales, $68.00.

April 11

Pays W. D. Allen Company's invoice of April 2, less discount. Receives invoice for shipment of merchandise from the Moline Manufacturing Co., $450.00, terms 2/10/n/30. Cash sales, $65.00.

April 12

Sells William Gibson $70.00 on account. Receives invoice, W. D. Allen Co., $500.00, 2/10/n/30. Pays for office supplies, $15.00. Cash sales, $74.00.

April 13

Pays the Barrett-Christie Company's invoice of April 4, less discount. Pays salaries the same as last week's. Withdraws $50.00 for personal use. Sells Adam Jones $57.50 on account. Cash sales, $65.00.

April 15

Pays Western Supply Company's invoice of April 2, net. Cash sales, $60.00.

April 16

Receives and pays a bill from the garage where the car is kept, for $30.00. Purchases a lot of hardware at a bankrupt sale, giving his check for the amount, $750.00. Returns to Moline Manufacturing Co. goods which cost $35.00, receiving credit for that amount. Cash sales, $58.00.

April 17

William Gibson returns as unsatisfactory goods purchased on April 8, to the amount of $7.50. He is given credit for that amount, and pays the

balance of his bill for that date. Receives an invoice from the Simmons Hardware Co., St. Louis, Mo., $750.00, 2/10/n/30. Pays freight on this shipment, $30.00.

April 18

Sells Herman Rowe, Morgan Park, Illinois, builders' hardware, $180.00 on account, f.o.b. his station. Pays freight on same, $2.50. Cash sales, $67.50.

April 19

Sells Andrew Anderson $75.00 on account. Jacob Gunderson pays his bill of April 9. Cash sales, $77.50.

April 20

Pays salaries for the week, with addition of $15.00 to a boy for general office and errand work. Pays Moline Manufacturing Co.'s invoice of April 11, less discount. Cash sales, $75.00. Henceforth cash sales will be reported as weekly totals.

April 22

Withdraws for personal use, $50.00. Pays W. D. Allen Co.'s invoice of April 12, less discount.

April 23

Andrew Anderson is allowed credit of $15.00 for merchandise which proved defective. He pays his account to date.

April 24

Sells Henry Greiner, Monee, Illinois, builders' hardware to the amount of $200.00. We prepay the freight, $4.50, and add it to the amount of the invoice, charging his account with the total.

April 25

Purchases a clock for the office, $15.00. Sells Herman Rowe on account, $50.00. Discounts own note at bank, $500.00 for thirty days, discounted at 6 per cent.

April 26

Pays $10.00 for repairs on store furniture. Pays $7.50 for materials used in decorating the show windows. Receives invoice from Hibbard, Spencer, and Bartlett, for $400.00, 2/20/n/30. Sells Jacob Gunderson $65.00 on account.

April 27

Sells William Gibson $75.00 on account. Pays salaries, same as last week. Withdraws $50.00 for personal use. Pays Simmons Hardware Co.'s invoice of April 17, less discount. Cash sales for the week, $395.00.

April 29

Pays a bill at the garage, $27.00, for supplies and work on the car. Receives invoice from Simmons Hardware Co., $300.00, 2/10/n/30. Cash sales, $69.00.

April 30

Herman Rowe pays his account to date. Sells Henry Greiner $90.00 on account. Cash sales, $105.00.

Post all accounts up to date and take a trial balance. Merchandise inventory April 30 is $6,740.00. Office supplies on hand amount to $35.00. Depreciation on the auto truck is taken to be 24 per cent for the year, and on office and store equipment it is taken to be 12 per cent yearly. Make all necessary adjustments for insurance and interest, in order to show as correctly as possible the true amount of the month's profit or loss. The pay-roll for two days (one-third of a week) is accrued.

Make all the entries necessary to adjust the accounts and close the books, and post these entries to the ledger.

Prepare a balance sheet as of April 30, and a statement of profit and loss for the month of April.

CHAPTER XXI

CONTROLLING ACCOUNTS

Some uses of special columns. Chapters xix and xx were devoted to a discussion of the books of original entry, with particular emphasis on the use of special columns in such books. There appeared, from this discussion, at least three distinct advantages resulting from the use of special columns in the various journals. These advantages are: (1) greater simplicity in posting; (2) further analysis of particular classes of transactions; (3) a further check on the accuracy of the entries. There is another advantageous use that may be made of the special column. This is its use in grouping a certain class of items of a similar nature for posting to a single account in the ledger, while allowing the details of this class of items to be shown in some form of subsidiary record.

The controlling account. Accounts Receivable furnishes an example of such a class of items, and Accounts Payable another. These two will be discussed in this chapter as representative of *controlling accounts*, since they are the two examples of the controlling account which are used in the accounting of nearly every business concern. Thus in the case of a business which sells on account to a considerable number of customers, it is clearly undesirable to carry an account in the general ledger with each one of these customers. Such a practice would make the ledger accounts so numerous as to cause confusion and make the work of obtaining a trial balance at the end of a period a slow and difficult process. It is much better to carry the accounts with individual customers in a separate "customers' ledger" or "sales ledger," and to carry in the general ledger an account entitled Accounts Receivable, to which all debits and credits to customers will be posted. The posting to this general ledger account will be done, for the most part, from the footings of certain special columns in the books of original entry.

The method by which this is accomplished can best be made clear by means of an illustration, which will be made as simple as possible.

Assume, then, a small retail business in which practically all purchases are made on account, and in which sales are made both on account and for cash. The following books of entry are used: (1) a general journal; (2) a purchases journal; (3) a sales journal; (4) a cash book: (*a*) cash receipts journal, (*b*) cash disbursements journal.

All purchases are entered in the purchases journal as purchases on account and so posted, the payments being recorded in the cash book if made by cash, and in the general journal if by note. All sales on account are recorded in the sales journal, cash sales being entered in the cash book. No attempt is made to show any analysis of either purchases or sales in the books of original entry. Sales tickets are made out in duplicate for each sale, different colors being used for cash and credit sales. The amount of each charge sale (meaning by "sale" the total of the goods sold to any customer at one time) is entered separately in the sales journal, while the cash sales tickets are totaled at the end of each day and entered in the cash book as a single item, debiting cash and crediting sales.

The forms to be used for the purchases journal and the sales journal in such a business may be made very simple indeed. Such forms are shown on pages 219 and 215, respectively. Each of them has only one money column, headed "Amount." And if controlling accounts are not to be carried for customers or creditors, the cash book might be equally simple, providing only one money column in each of the cash journals, as shown on page 141.

Assume, however, that it is intended to make use of "controlling" accounts for accounts receivable and accounts payable. This means that there will appear in the general ledger a single account which will show the total due from customers on open account, and a single account to show the total due to creditors on open account. These two accounts, known as "Accounts Receivable" and "Accounts Payable," respectively, are *controlling* accounts. The detailed debits and credits to each customer will be entered in his individual account in a subsidiary ledger known as the "customers' ledger" or "sales ledger." Similarly, the individual account of each creditor will appear in another subsidiary ledger known as the "creditors' ledger" or "purchases ledger."

This change in the ledger accounts will necessitate certain modifications of the forms of books of original entry, as previously illustrated.

This is not true of the purchases journal or the sales journal, however, under the conditions assumed for this business. Thus, in order to carry an Accounts Receivable account it is not necessary to change the form of the sales journal, nor to introduce any additional columns. Since the sales recorded are all sales on account, the footing of the single "Amount" column may be posted not only to the credit of sales but at the same time to the debit of accounts receivable. The amount of each sale would be posted to the debit of the account with the individual customer, in the "customers' ledger," or "sales ledger," such posting being made either from the items entered in the sales journal or from the sales tickets or invoices.

But while the same form of sales book may be employed to record the debits to customers, some modification must be made in any form of journal which is used to record the credits to customers. The greater part of such credits are entered on the debit or receipts side of the cash book. If the Accounts Receivable account in the general ledger is to be used as a control on all accounts with individual customers, a column for "Accounts Receivable, Credit" must be included in the cash receipts journal. If posting to the credit of customers' accounts is to be done from the cash receipts journal and not from remittance slips or other vouchers, a separate ledger folio column will be needed to show postings to the customers' ledger. If cash discounts are to be granted to customers, still another column will be needed in the cash receipts journal for "Cash Discount on Sales, Debit." Since such discounts are not usually allowed in a retail business, the cash receipts journal might take the following form:

CASH RECEIPTS

Date		Account Credited	Explanation	General L.F.	Customers' L.F.	General Ledger Cr.	Accounts Receivable Cr.	Sales Cr.	Cash Dr.
Jan.	1	Balance	On hand						3,500 00
	2	H. B. Reed	On account				50 00		50 00
	2	Sales	Cash sales					85 00	85 00
	3	Int. on bonds	Int. fifth L.L.			10 00			10 00
	4	B. L. Strong	In full of acct.				80 00		80 00

It will be apparent that in using this form of cash receipts journal no posting of single items will be made into the general ledger except

from the column headed "General Ledger, Cr." In this column are entered the amounts to be credited to general ledger accounts whose names appear in the "Account Credited" column, and for which no special column is provided. The credit to sales will be posted, as explained previously, through the footing of the column for sales. The total of the column headed "Accounts Receivable, Cr." will be posted to the credit of the controlling account, accounts receivable, in the general ledger, while the credits to the individual customers' accounts will be posted item by item to the appropriate accounts in the customers' ledger, the total of these items being, of course, the same as the total of the column. A separate folio column is provided for the folio numbers in the customers' ledger.

It is apparent that following this procedure in connection with the record of sales on account and with cash receipts would result in having posted into a single account in the general ledger, at the end of the accounting period, the total of the debits made to customers for merchandise sold them on account, and also the total of the credits made to these customers for cash received in payment of their accounts. The items composing the total of such a debit will have been posted to the proper accounts in the subsidiary ledger, as will the items composing the total credit mentioned above. If no entries were made to the debit or credit of customers' accounts from any other books of original entry, then it is evident that, when all posting had been done to date, the balance in Accounts Receivable, the controlling account, would equal the total of the balances of the customers' accounts. In the type of business under discussion, any entries made to the customers' accounts which are not recorded in one of these two journals would be recorded in the general journal. Any such entry made in the general journal and affecting accounts receivable would need to indicate not only the debit or credit to accounts receivable in the general ledger but also the name of the customer's account which was to be debited or credited in the customers' ledger. Thus if B. L. Strong had given his note for the amount of his account, instead of paying cash, the entry would have been made in the general journal, the journalization being as follows:

Notes receivable	$80.00	
Accounts receivable, B. L. Strong		$80.00

The credit would be posted to accounts receivable in the general ledger, and also to the credit of Strong's account in the customers' ledger, so that the control on the individual accounts would still be maintained in the accounts receivable account. This principle must always be held in mind in making any entry by which a controlling account is affected.

Assuming that the retail establishment under discussion had dealings with several wholesale houses from which they purchased merchandise on account, it is probable that they would also make use of a creditors' ledger to show the detail of these accounts, with a controlling account in the general ledger, headed "Accounts Payable." The same form of purchases journal that has already been discussed (see page 219) could be used, provided a different procedure were followed in posting from this journal. Since the amounts entered in this record all represent purchases on account, the total would be posted to the debit of Purchases and to the credit of Accounts Payable. The credits to the accounts of the individual creditors might, as in the case of the sales, be posted either from the entries in the book of original entry or from the invoices.

The chief source of credit posting to Accounts Payable is the cash disbursements journal, in which payments to creditors are recorded. A form of such a journal which would fill the needs of such a business as the one assumed here is as follows:

CASH DISBURSEMENTS

Date		Account Debited	Explanation	General L. F.	Creditors' L.F.	General Ledger Dr.		Accounts Payable Dr.		Cash Discount on Purchases Cr.		Cash Cr.	
Jan.	1	Rent	Rent for Jan.			100	00					100	00
	2	Smith & Co.	Invoice No. 145					500	00	10	00	490	00
	3	Notes payable	Hyde Park Bank 12/2			1,000	00					1,000	00
	4	Wilson & Co.	Invoice No. 147					450	00	9	00	441	00

In using such a form as this, each item entered in the "General Ledger, Dr." column would be posted separately to the debit of the account whose name appears opposite it in the "Account Debited" column. The total of the column headed "Accounts Payable, Dr."

would be posted to the debit of that account in the general ledger, each item in that column being posted separately to the individual creditor's account in the creditors' ledger. The footing of the column headed "Cash Discount on Purchases" would be posted to the credit of the account of that title. The last column, headed "Cash, Cr.," is used to show the net cash payment involved in each case, and is in effect the credit side of the cash account, the debit side being the "Cash, Dr." column in the cash receipts journal.

Entries for transactions affecting any of the accounts with trade creditors which do not happen to fall into either the purchases journal or the cash disbursements journal must still be made in such a way as to make possible the posting to both the item account in the subsidiary ledger and to the controlling account in the general ledger. The principle governing this was discussed in connection with accounts receivable, and what was said there applies also to the creditors' accounts. Thus, if the business returns to a trade creditor unsatisfactory goods to the amount of $100, the entry could not be made in any of the special journals discussed above, but would have to be made in the general journal, the journalization being as follows:

Accounts Payable, Smith Brothers . .	$100.00	
Purchase Returns and Allowances . . .		$100.00

The debit here would, as stated above, be posted both to the general ledger account and to the item account in the subsidiary ledger.

The use of the controlling account illustrated. The relation of the controlling account to the subsidiary ledger which it controls, and the relations of the special columnar journals to each other and to the use of the controlling accounts, may be made clearer by means of a simple illustration. This illustration will present all the books of entry which would be required by a simple retail business. Representative entries will be made in these books, and the effect of these entries on the accounts will be depicted. It would of course be impracticable to show the entries for a month's business, but for purposes of illustration the few entries shown below may be taken as representing the total business transactions for a month. The skeleton ledger accounts, used to represent the ledger, are numbered, the number of each representing the page upon which that account is found. The forms

of the various journals are those already illustrated and discussed. They are combined here into what might be called a tabloid set of books, as follows:

PURCHASES JOURNAL **Page 1**

Date		L.F.	Name of Creditor	Address	Terms	Invoice Number	Accounts Payable, Cr.	
Oct.	1	4	Hart, Schaffner & Marx		2/10/n/30	1	600	00
	4	1	Adler Bros.		2/10/n/30	2	750	00
	10	5	Johnson & Murphy		Net 30	3	500	00
	16	6	Wilson Bros.		2/10/n/30	4	450	00
	17	7	J. B. Stetson Co.		2/10/n/60	5	300	00
	24	2	Black Cat Textile Co.		2/10/n/30	6	250	00
	29	3	Cluett, Peabody & Co.		Net 30	7	300	00
	31	L.9	Purchases, Dr.				(4)3,150	00

NOTE.—It will be seen here that there are two items posted to the general ledger, both of the same amount. The ledger page of the purchases account is indicated in the folio column at the left. That of accounts payable is shown in parenthesis just to the left of the footing of the amount column.

SALES JOURNAL **Page 1**

Date		L.F.	Name of Customer	Address	Terms	Invoice No.	Accounts Receivable, Dr.	
Oct.	1	1	O. L. Buhr	1214 Fourth St.		1	75	00
	4	6	D. Tollefson	515 Oak St.		2	50	00
	8	4	H. A. Howard	744 University Ave.		3	35	00
	10	5	P. T. Nelson	1525 Riverside Ave.		4	12	50
	14	7	A. Wyman	1206 Como Ave.		5	65	00
	17	1	O. L. Buhr	1214 Fourth St.		6	14	50
	20	3	F. T. Enke	625 Ninth Ave.		7	60	00
	24	6	D. Tollefson	515 Oak St.		8	18	00
	27	5	P. T. Nelson	1525 Riverside Ave.		9	50	00
	30	2	F. B. Barton	78 Prospect Place.		10	65	00
	31	L.7	Sales, Cr.				(1) 445	00

NOTE.—The folio numbers of the general ledger accounts affected are shown in the same manner as in the purchases journal. Thus the page of sales account is indicated in the folio column, while that of accounts receivable is written in parenthesis next to the footing of the amount column.

CASH BOOK—CASH RECEIPTS **Page 2**

Date		Account Credited	Explanation	General Ledger F.	Accounts Receivable F.	General Ledger, Cr.	Accounts Receivable, Cr.	D Sales, Cr.	Cash, Dr.
Oct.	1	J. B. Wright, capital	Investment			6,500 00			6,500 00
	4	Sales	Cash sales to date					215 00	215 00
	7	Notes receivable	F. Johnson's note 8/7	2		100 00			100 00
	7	Interest on notes receivable	F. Johnson's note 8/7	12		1 00			1 00
	11	O. L. Buhr	Invoice No. 1		1		75 00		75 00
	13	Sales	Cash sales to date					320 00	320 00
	17	D. Tollefson	Invoice No. 2		6		50 00		50 00
	21	H. A. Howard	Invoice No. 3		4		35 00		35 00
	25	Sales	Cash sales					250 00	250 00
	29	A. Wyman	Invoice No. 5		7		65 00		65 00
	30	D. Tollefson	Invoice No. 7		6		18 00		18 00
	31	Sales	Cash sales					175 00	175 00
						6,601 00	(1) 243 00	(8) 960 00	7,804 00
Nov.	1	Balance on hand							4,843 00

CASH DISBURSEMENTS

Page 3

Date		Account Debited	Explanation	General L.F.	Accounts Payable F.	General Ledger Dr.	Accounts Payable, Dr.	Cash Discount on Purchases, Cr.	Cash, Cr.
Oct.	1	Rent	For October	13		100.00			100.00
	3	Office expense	Stamps and stationery	12		60.00			60.00
	6	Sales salaries	Weekly pay-roll	11		125.00			125.00
	9	Hart, Schaffner & Marx	Invoice No. 1		4		600.00	12.00	588.00
	13	Adler Bros.	Invoice No. 2		1		750.00	15.00	735.00
	13	Sales salaries	Week's pay-roll	11		125.00			125.00
	17	Office equipment	Adding machine	4		225.00			225.00
	20	Sales salaries	Week's pay-roll	11		125.00			125.00
	26	Wilson Bros.	Invoice No. 4		6		450.00	9.00	441.00
	27	J. B. Stetson Co.	Invoice No. 5		7		300.00	6.00	294.00
	27	Sales salaries	Week's pay-roll	11		125.00			125.00
	30	Office expense	Telephone and telegraph	12		18.00			18.00
						903.00	(5) 2,100.00	(14) 42.00	2,961.00
Oct.	31	Balance							4,843.00
									7,804.00

NOTE.—The method of posting the foregoing forms of journals was discussed above. It will be noted that where the footing of a column is to be posted, the folio number of the account is indicated by writing the number in parenthesis just to the left of the column footing.

JOURNAL

Page 1

			Oct. 1			
			Cash	6,500	00		
		2	Notes Receivable	100	00		
		6	J. B. Wright, Proprietor			6,600	00
			To record J. B. Wright's original investment in retail clothing business (Cash $6,500 and F. Johnson's note for $100, dated 8/7/19, with interest at 6 per cent)				
			25				
		2	Notes Receivable	60	00		
		1/3	Accounts Receivable, F. T. Enke			60	00
			His thirty-day note without interest for our Invoice No. 118				
			29				
		5/6	Accounts Payable, Wilson Bros.	125	00		
		10	Purchase Returns and Allowances			125	00
			Returned unsatisfactory goods Invoice No. 78				
			30				
		8	Sales Returns and Allowances	20	00		
		1/5	Accounts Receivable, P. T. Nelson			20	00
			Returned goods on Invoice No. 9				

GENERAL LEDGER

Accounts Receivable

Page 1

Oct. 31		SJ 1	445	00	Oct. 31		C 2	243	00
					30		J 1	20	00
					25		J 1	60	00

Notes Receivable

Page 2

Oct. 1		J 1	100	00	Oct. 7		C 2	100	00
25		J 1	60	00					

Office Equipment

Page 3

Oct. 17		C 3	225	00					

Accounts Payable

Page 4

Oct. 31		C 3	2,100	00	Oct. 31		PJ 1	3,150	00
29		J 1	125	00					

J. B. WRIGHT, PROPRIETOR — Page 5

					Oct. 1	Investment	J 1	6,600	00

MERCHANDISE SALES — Page 6

					Oct. 31		SJ 1	445	00
					31		C 2	960	00

SALES RETURNS AND ALLOWANCES — Page 7

Oct. 30		J 1	20	00					

MERCHANDISE PURCHASES — Page 8

Oct. 31		PJ 1	3,150	00					

PURCHASES RETURNS AND ALLOWANCES — Page 9

					Oct. 29		J 1	125	00

SALES SALARIES — Page 10

Oct. 6		C 3	125	00					
13		C 3	125	00					
20		C 3	125	00					
27		C 3	125	00					

OFFICE EXPENSE — Page 11

Oct. 3		C 3	60	00					
30		C 3	18	00					

RENT — Page 12

Oct. 1		C 3	100	00					

CASH DISCOUNT ON PURCHASES — Page 13

					Oct. 31		C 3	42	00

INTEREST ON NOTES RECEIVABLE — Page 14

					Oct. 7		C 2	1	00

CUSTOMERS' LEDGER

O. L. Buhr, 1214 Fourth Street — Page 1

Oct. 1		S 1	75 00	Oct. 11		C 2	75 00
17		S 1	14 50				

F. B. Barton, 78 Prospect Place — Page 2

Oct. 30		S 1	65 00				

F. T. Enke, 625 Ninth Avenue — Page 3

Oct. 20		S 1	60 00	Oct. 25		J 1	60 00

H. A. Howard, 744 University Avenue — Page 4

Oct. 8		S 1	35 00	Oct. 21		C 2	35 00

P. T. Nelson, 1525 Riverside Avenue — Page 5

Oct. 11		S 1	12 50	Oct. 30		J 1	20 00
27		S 1	50 00				

D. Tollefson, 515 Oak Street — Page 6

Oct. 4		S 1	50 00	Oct. 17		C 2	50 00
24		S 1	18 00	30		C 2	18 00

A. D. Wyman, 1206 Como Avenue — Page 7

Oct. 14		S 1	65 00	Oct. 29		C 2	65 00

CREDITORS' LEDGER

Adler Brothers — Page 1

Oct. 13		C 3	750 00	Oct. 4		P 1	750 00

Black Cat Textile Company — Page 2

				Oct. 17		P 1	250 00

CLUETT, PEABODY & COMPANY — Page 3

					Oct. 29		P 1	300	00

HART, SCHAFFNER & MARX — Page 4

Oct. 9		C 3	600	00	Oct. 1		P 1	600	00

JOHNSON AND MURPHY — Page 5

					Oct. 10		P 1	500	00

WILSON BROTHERS — Page 6

Oct. 29		J 1	125	00	Oct. 16		P 1	450	00
26		C 3	450	00					

J. B. STETSON COMPANY — Page 7

Oct. 27		C 3	300	00	Oct. 17		P 1	300	00

A trial balance taken from the ledger at the end of the month appears as follows:

J. B. WRIGHT

TRIAL BALANCE—OCTOBER 31, 1919

Cash	$4,843.00	
Accounts receivable	122.00	
Notes receivable	60.00	
Office equipment	225.00	
Accounts payable		$ 925.00
J. B. Wright, capital		6,600.00
Sales		1,405.00
Sales returns and allowances	20.00	
Purchases	3,150.00	
Purchase returns and allowances		125.00
Sales salaries	500.00	
Office expense	78.00	
Rent	100.00	
Cash discount on purchases		42.00
Interest on notes receivable		1.00
	$9,098.00	$9,098.00

The two subsidiary ledgers may be summarized as follows:

Schedule No. 1—Accounts Receivable

O. L. Buhr	$ 14.50
F. B. Barton	65.00
P. T. Nelson	42.50
Total	$122.00

Schedule No. 2—Accounts Payable

Black Cat Textile Co.	$ 250.00
Cluett, Peabody & Co	300.00
Johnson & Murphy	500.00
Total	$1,050.00
Less Wilson Bros. (debit balance)	125.00
Balance	$ 925.00

It will be noted that the result of each of these summaries agrees with the balance shown by the controlling account for the subsidiary ledger in question.

Summary. The principles which have been developed in connection with the use of the controlling account may be summarized as follows:

1. If a group of accounts of similar nature becomes very numerous, it is often undesirable to carry the individual accounts which compose this group in the general ledger. (For example: "Accounts Receivable," "Accounts Payable," "Machinery," "Raw Materials.")

2. The situation described in (1) may be met by carrying the individual accounts of this group in a special subsidiary ledger, and carrying in the general ledger a single controlling account for the entire group.

3. The use of a subsidiary ledger and a controlling account necessitates some means of posting the items of debit and credit to the individual accounts, and also of posting the same items in summarized form into the controlling account.

4. In order to secure postings in summarized form to a controlling account, special columns will be required in books of original entry in which entries are made affecting such controlling account.

5. Posting to the accounts in the subsidiary ledger may be made either from the individual entries in the books of original entry, or

directly from the vouchers made out in connection with the transactions which affect these individual accounts.

Also, the discussion and the illustrations given in this chapter should indicate that at least four purposes may be served by special columns in books of original entry. These four purposes are: (1) the saving of labor in posting; (2) check on the equality between debit and credit entries in any given journal, obtained by comparing the totals of the debit columns with the totals of the credit columns; (3) analysis of data in the books of original entry; (4) the use of subsidiary ledgers and controlling accounts.

QUESTIONS FOR CLASS DISCUSSION

1. You are asked to design a complete accounting system for a wholesale hardware establishment. Outline the information which you should require before you could decide upon the form of the various books of original entry.
2. Define the controlling account. Give examples of such accounts. What are the advantages in the use of controlling accounts?
3. Refer to the books of original entry that you were asked to plan for the use of the Miller Company and the Saunders Company, in the questions at the end of chapters xix and xx. Would you need to modify these forms in order to make use of controlling accounts with accounts receivable and accounts payable? Why, or why not? If such modifications are necessary, describe them in detail.
4. Give an analysis of the debits and the credits that affect the account with accounts receivable. Through what book or books of original entry will each of these debits and credits be posted?
5. Answer the same questions with regard to accounts payable that are asked in Question 4 with regard to accounts receivable.
6. Referring again to the Miller Company, assume that they use a subsidiary ledger for accounts with trade creditors, one for city customers, and one for country customers, and that all posting to these subsidiary ledgers is done directly from the vouchers. You are asked:
   a) To design a complete set of books of original entry for this company.
   b) To describe in detail the posting to be made from each of the books of original entry.
   c) To describe in detail the posting to the item accounts in the subsidiary ledger, telling what vouchers are used for this posting.

   What bases of analysis do the books of original entry which you have designed provide for each class of transactions? Discuss the value of each such basis of analysis.

7. Can you suggest any classes of accounts beside accounts with customers and accounts with creditors, which might advantageously be kept in subsidiary ledgers? If so, outline a method of recording the debits and credits to such accounts, and of posting these debits and credits to the general ledger and to the subsidiary ledger.

REFERENCES FOR FURTHER STUDY

KESTER, ROY B., *Accounting Theory and Practice*, Vol. I, chaps. **xlvi** and xlvii.

ESQUERRÉ, PAUL-JOSEPH, *Applied Theory of Accounts*, chap. xi.

PATON, W. A., AND STEVENSON, R. A., *Principles of Accounting*, pp. 96–102.

CHAPTER XXII

THE CONSTRUCTION AND INTERPRETATION OF ACCOUNTS—ASSETS

Chapters vi and vii were devoted to a consideration of the construction and interpretation of various kinds of accounts. The discussion there given was quite elementary and did not mention some accounts which are frequently used. Beginning with the present chapter, that earlier discussion will be reviewed and some things will be introduced which were there omitted.

In doing this, the method of approach employed will be the same as that employed in the earlier discussion of the subject. Thus, in connection with each account taken up, the following points will be considered: (1) the purpose of the account; i.e., the information which is sought from the account; (2) the transactions which are to be recorded in it, or the debits and credits which are to be made to it; (3) what the balance of the account represents, and what disposition is made of this balance in the accounting reports.

Cash account. Cash has already been considered from various aspects, and there is nothing to be gained by repeating some of the points that have previously been made. The student may be reminded, however, that Cash includes not only money of all kinds but commercial paper, such as checks, bank drafts, and money orders, which is immediately bankable without being discounted. It also includes credit which the business may have with any bank. Such credit may be established by depositing money or bankable paper, or by borrowing from the bank. Borrowing from the bank may be accomplished either by giving the one-name note of the borrowing concern, or by discounting a note or trade acceptance on which some trade debtor of the borrowing firm is primarily liable. Credit with the bank may also arise through collections from customers made by the bank and deposited to the credit of the business, through interest accruing on the balance at the bank, and through collections of interest coupons (on bonds).

The transactions affecting the Cash account, and the debits and credits to be made to that account, may be indicated as follows:

CASH

Debit:	Credit:
With the amount of all money and bankable paper received. With all credits made to the account of the business (aside from credits made as a result of the deposit of the foregoing) by the bank, for collections, interest, etc.	With all money paid out in the form of currency (usually from a petty cash fund). With all checks drawn. With all other charges made to the account of the business by the bank, for any cause whatever.

The entries for all these debits and credits will be made in the cash book, as previously explained. The amount of cash on hand (held by the business) at any time includes cash received by the business but not yet deposited, as well as the amounts of any special funds that may be carried by the business, such as petty cash, office cash, and the like.

In chapter vii it was stated that a *proof of cash* should be taken frequently. It is also desirable to affect a *reconciliation* of cash as shown by the records of the business with the figure shown by the bank statement, whenever such a statement is received. This means comparing the amount of unused credit at the bank as shown by the firm's records with the amount of such credit as shown by the bank statement. The figure shown by the records of the business, plus the total of checks drawn but not included in the bank statement, should equal the balance shown by that statement. Any discrepancy must be accounted for and adjusted.

Accounts Receivable. Accounts Receivable is a controlling account, showing the total amount owed to the business on open account by its customers. Posting to this account is done chiefly from the footings of certain special columns in the books of original entry, while the accounts in the customers' ledger, which show the amounts due from individual customers, are posted either from the entries in the book of original entry or directly from the vouchers.

The kinds of transactions affecting the Accounts Receivable account, and the nature of the debits and credits to this account, may be indicated as follows:

ACCOUNTS RECEIVABLE

Debit:	Credit:
With the invoiced price of all sales to customers on open account. With freight, cartage, etc., prepaid, where such items are added on the invoice (sometimes included in invoiced price). With the amount of notes receivable given by customers and dishonored at maturity, when such dishonored notes are not otherwise recorded. With all charges incurred in connection with notes receivable dishonored, when such charges are not debited to a separate account.	With cash received from customers in payment of accounts. With the amount of all discounts allowed to customers for cash payments. With the amount of all allowances and rebates of any sort granted to customers. With notes given by customers in payment of accounts. With the invoice price of goods returned by customers.

The balance of this account shows the total owed the business on open account by its customers. It is desirable that the individual accounts should be totaled rather frequently, perhaps at the end of each month, and the total compared with the balance of the controlling account. Any discrepancy should be discovered and explained, and the necessary adjustments made to bring the individual accounts into agreement with the controlling account.

Reserve for Bad Debts. It has already been suggested that the assets which take the form of claims against customers are subject to some evaluation. Experience has demonstrated that customers do not always make good their promises to pay. In order to guard against an overstatement of the proprietorship and of the current profits, a charge is made at the end of the fiscal period to an account with bad debts, or loss from bad debts, and a credit made to an account with *reserve for bad debts.* The latter account is a *valuation* account, so named because it is used, in connection with an asset account, for the purpose of helping to show the correct valuation of the asset in question. It is similar in its nature to the depreciation reserve accounts, and should be shown on the balance sheet as a deduction from the amount of the total accounts receivable, as follows:

Accounts Receivable . . .	$2,500.00	
Reserve for Bad Debts . .	50.00	
		$2,450.00

The amount to be charged against income and credited to the reserve for bad debts account at the end of the period depends partly on the experience of the business, and partly on the character of the accounts receivable at that particular time. It should be sufficient each period to cover the estimated losses of that period. Whenever such a loss is definitely ascertained to have occurred, the reserve account will be debited and the customer's account credited with the amount of such loss. This serves to write off the now worthless account, and to indicate that a loss of that amount has actually been sustained.

The type of transactions affecting the Reserve for Bad Debts account, and the nature of the debits and credits to be made to this account, may be indicated as follows:

RESERVE FOR BAD DEBTS

Debit:	*Credit:*
With the amount of any account claim against a customer which is written off as uncollectable.	At the close of the accounting period with the amount estimated to be equal to the losses from bad debts attributable to the period just past.

The balance of such an account, if a credit, indicates the amount by which the estimated losses exceed the actual losses ascertained to that date. If a debit balance, it shows the amount by which such ascertained losses have exceeded the estimate. A debit balance in this account may mean that some extraordinary loss has occurred. Or it may mean that the the actual losses for the period have exceeded the credit made at the end of the preceding period. Or it may mean that the administration of credits and collections has been inefficient. In any case it is a matter of interest to the management, and requires an explanation.

Notes Receivable. The nature of Notes Receivable and the circumstances under which they may be received have already been discussed rather fully. It is the purpose of the Notes Receivable account to show the amount of short-time notes and accepted time drafts held by the business, including only those which have not yet reached maturity. Where notes are received from parties other than customers, it is desirable to set up a separate Notes Receivable account for such notes.

The kind of transactions which affect the Notes Receivable account, and the nature of the debits and credits to this account, are indicated by the following:

NOTES RECEIVABLE

Debit:	*Credit:*
With the face value of all notes received. With the face value of accepted time drafts received.	With the amount of cash or other property received in payment of notes. With the face value of any notes transferred, sold, discounted, or in any way disposed of. With the face value of notes dishonored(not paid at maturity).

The balance of this account shows the total face value of all the unmatured written promises to pay received by the business from its customers, and which are still held by the business. As stated above, it is generally well to have a separate account for notes received from those other than customers. Also, as soon as a note passes maturity without being paid, it should no longer be carried under the head of notes receivable, since it is presumably inferior in quality to the other assets composing that group, and should therefore be valued on a different basis. Of course, where a business holds only a few notes and the manager knows the circumstances in connection with each, such a division of this account may be unnecessary.

Notes Receivable Discounted. It is quite usual for a business concern to discount customers' notes at the bank, in order to secure the means of meeting its own obligations. In order to transfer such a note to the bank, it must be indorsed by the payee, who thus assumes a secondary liability for its payment at maturity. In most such cases the bank is in reality lending the money to the concern which sold the goods, and which discounts the note, mainly on the credit of that concern, reinforced by whatever additional security the signature of the maker may represent. For if at maturity the maker fails to take up the note at the bank, the payee, who indorsed it, must do so.

When a customer's note is discounted at the bank, therefore, a credit to Notes Receivable scarcely causes the accounts to reflect the true condition of affairs, as it entirely ignores the liability to the bank

which has been assumed by the indorser. This liability is not an absolute one, but is contingent upon the failure of the maker to pay the note at maturity. It is therefore known as a *contingent* liability. There is more than one way in which these facts may be shown in the accounts and on the balance sheet. One method which is acceptable will be indicated here. When the note is discounted, cash and interest will be debited, and an account called *Notes Receivable Discounted* will be credited. This leaves the amount of the discounted note included in the balance of the Notes Receivable account, this amount being offset by the credit to *Notes Receivable Discounted.*

Assuming the balance of the notes receivable account to be $600, and the balance of the Notes Receivable Discounted account to be $200, the showing on the balance sheet would be as follows:

Notes Receivable	$600.00	
Less Notes Receivable Discounted . .	200.00	
		$400.00

This has the effect of showing the notes receivable at their net figure, $400, and at the same time it serves notice to anyone reading the balance sheet that a contingent liability exists, to the amount of $200. When one of the discounted notes matures, if no notice is received from the bank of its non-payment by the maker, an entry is made debiting Notes Receivable Discounted and crediting Notes Receivable. If such notice is received, Notes Receivable Discounted is debited and Cash credited, since the note must be taken up at the bank by the indorser. The face value of the dishonored note is then transferred from the Notes Receivable account, being debited either to the customer's open account or to an account with Notes Receivable Dishonored, which will be considered later.

The debits and credits to be made to the account with Notes Receivable Discounted may be indicated as follows:

NOTES RECEIVABLE DISCOUNTED

Debit:	*Credit:*
At the time the note is paid with the face value of the discounted note paid. At the time the note is dishonored with the face value of the discounted note dishonored (crediting notes receivable).	At the time of discount with the face value of the notes receivable discounted.

Notes Receivable Dishonored. As indicated in the foregoing, a dishonored note should not continue to be carried in the Notes Receivable account. The face value of the note may be transferred back to the customer's open account, which would also be charged with any expenses incurred in connection with the note's dishonor, such as protest fees, or the face value of the note may be carried to an account entitled *Notes Receivable Dishonored.* If the first method, that of debiting the customer's account, is used, special attention must be given to the valuation of such accounts for balance-sheet purposes. If the Notes Receivable Dishonored account is used, the debits and credits to be made to this account may be indicated as follows:

NOTES RECEIVABLE DISHONORED

Debit:	*Credit:*
At the time of dishonor the face value of any note receivable dishonored (crediting notes receivable).	With the face value of any note dishonored which is later paid by the maker or any previous indorser. With the face value of any dishonored note for which a new note is accepted. With the face value of any dishonored note written off as uncollectable (debiting reserve for bad debts, or some special account, such as "loss from uncollectable notes," according to the method in use in the business).

The balance of the Notes Receivable Dishonored account shows the face value of all such notes still held in the hope of collection, and is shown on the balance sheet as an asset, subject to a valuation which must be made after careful consideration of the circumstances in connection with each such note. Protest fees and other charges incurred in connection with such notes will be charged to the open account of the maker of the note. If ascertained to be uncollectable, the amount of such charges will be credited to Accounts Receivable and debited to Reserve for Bad Debts.

Accounts with fixed assets. In chapter vi it was explained that an account with a fixed asset should be debited with the cost value of any additions to that asset, and credited with the cost value of any part of the asset destroyed, sold, or otherwise retired from use in the business. It was also pointed out that while the asset account

showed the particular asset always at cost, an account must be carried with reserve for depreciation on the fixed asset in order to keep a record of the loss in its value which is estimated to have occurred through its approach to the end of its useful life.

The generally accepted basis of valuation of the fixed assets for accounting purposes, then, is that of cost less accrued depreciation. The principles involved seem logical enough, and should not be difficult to understand, and the student should by this time be quite familiar with the manner in which such estimated depreciation is booked, as well as the method by which the valuation of fixed assets is shown on the balance sheet.

Charges to capital versus charges to revenue. It is not always simple or easy to carry out correctly and consistently the method of valuation indicated in the foregoing discussion. The difficulty in doing so arises from two main sources: (1) the difficulty in establishing a correct rate for estimating depreciation; (2) the difficulty of distinguishing in every case between expenditures which add to the value of the fixed assets and those which are properly to be charged as current expenses.

The first source of difficulty, that of the depreciation rate, is merely a matter of estimating the probable useful life of the asset. Such estimates are best made on the basis of experience with similar assets, either in the business in question or in other like business concerns. An adequate record of the life and performance of each unit of fixed assets used in the business will aid greatly in setting future depreciation rates and revising existing ones. The problem involved here may well receive careful and detailed study by the student of accounting, but it does not seem wise to devote more time to it at present.

The other problem mentioned, that of the distinction between expenditures for current expenses and those for additions to fixed assets, must also be considered rather briefly here. The problem may be divided into two parts, as follows: (1) What expenditures are properly chargeable to the original cost of the asset? (2) What expenditures are properly chargeable as additions to the value of the asset?

As regards the first point, the original cost, it may be illustrated by indicating a few of the typical questions of this nature which are

likely to come up. Thus in the case of a building which is constructed by the business, a decision would have to be made whether each of the following expenditures represented a part of the cost of the building or a current operating expense of the business: (1) the cost of a preliminary survey of the site; (2) payment for the architect's plans; (3) interest on the money invested in materials during the process of construction; (4) insurance of the materials during the process of construction. Or, in purchasing a new machine, is the cost of making a concrete base for its installation and the expense of actually installing it to be charged as part of the cost of the asset or as an operating expense? The principle that governs in all such cases is that the expenditure should be treated as a part of the cost of the asset if it is an expenditure necessary to the acquisition of the asset in a working condition. On this basis all of the expenditures cited would be properly chargeable to the asset accounts.

As the asset continues in use, certain expenditures will be necessary to maintain it in efficient operating condition. The building will require repairs and paint; taxes and insurance premiums must be paid in connection with its use. The machine or the office equipment will require repairs from time to time, as well as certain supplies necessary to their operation, such as oil, waste, and the like, and will necessitate the payment of taxes and insurance premiums. Expenditures of this type, representing as they do part of the necessary cost of using the asset for the current period, are pure expense, and should be charged as part of the current operating expense of the business. Such expenditures are said to be *charges to revenue.*

Opposed to this type of expenditures is the class of expenditures which add to the investment in the asset, or the cost value of the asset. Such expenditures are those involved in the construction of the new building, or of a new wing to the old building, or in equipping the machine with some improved device that adds to its length of life or productiveness. Such expenditures are said to be *charges to capital,* since they represent additions to the long-time investment of the proprietors.

Unless considerable care is used, expenditures of one of these classes may be confused with those of the other class. Thus it is not difficult to consider as an addition to the asset some expenditure which, if its effects were carefully analyzed, would be found to be necessary

for the maintenance of the asset, and not an addition to its value. On the other hand, a real addition to investment might easily be mistaken for an operating expense. This distinction between *capital* and *revenue* is an important one, since the showing of the current profits for each period and the showing of the proprietorship from time to time depend on the correctness with which such distinction is made. Thus if certain expenditures made in connection with the maintenance of a fixed asset, and properly chargeable to revenue, are wrongly charged to capital, or "capitalized," not only will the assets, and consequently the proprietorship, be overstated, but the expenses for the period will be understated and the net profit therefore overstated by that amount.

The problem of distinguishing between capital and revenue charges is one which continually faces the accountant. There is no absolute rule to be laid down which will serve as a formula for its solution. It is merely a matter of careful judgment whether the expenditure in question represents an addition to the investment or whether it represents an operating expense of the current period.

The debits and credits to a fixed asset account and the corresponding reserve for depreciation, or valuation account, may be indicated by the following statement:

BUILDINGS

Debit:	*Credit:*
With the total cost of all buildings purchased or constructed. With the cost of any additions or improvements which add to the value of a building.	With the cost value of any buildings sold or otherwise disposed of. With the cost value of any part of a building destroyed or otherwise retired from use.

RESERVE FOR DEPRECIATION OF BUILDINGS

Debit:	*Credit:*
With the excess of cost value over the sale price or salvage value of any building or part of a building sold, destroyed, or otherwise retired from use in the business as a result of the operation of the depreciation factor.	At the close of each with fiscal period the estimated depreciation on buildings for that period.

As previously stated, the balance in the fixed asset account will show the cost value of all the buildings which are at that time owned

and used by the business. The balance of the valuation account will show the amount of depreciation estimated to have accrued on the buildings then in use. The difference between the two balances represents the present valuation placed on the buildings for purposes of the balance sheet. These statements hold true so long as the depreciation reserve account is debited only with the amount of the realized loss of value which results from depreciation in some form. Thus if a building is destroyed by fire, storm, or other unforeseen accidental cause, Reserve for Depreciation of Buildings should be debited only with the amount of the estimated depreciation on that building up to the time of its destruction. If the amount of insurance collected is less than the excess of cost over estimated depreciation, the difference should be charged to some special profit and loss account, such as "Loss from Fire." Assume that the cost of a new building is $100,000, and its estimated life twenty years. Early in the second year of its life a wing of the building, the original cost of which is $20,000, is destroyed, and only $10,000 in insurance is collected. At the end of the first year, after the entry had been made to record the depreciation, the buildings account and depreciation reserve account would appear as follows:

BUILDINGS

		100,000	00				

RESERVE FOR DEPRECIATION ON BUILDINGS

						5,000	00

The portion of estimated accrued depreciation applicable to the wing which is destroyed is $1,000. The entry to record the loss might be made as follows:

Cash (from the insurance company)	$10,000.00	
Reserve for Depreciation of Buildings	1,000.00	
Loss from Fire	9,000.00	
Buildings		$20,000.00

The two accounts under discussion would then appear:

BUILDINGS

		100,000	00			20,000	00

RESERVE FOR DEPRECIATION ON BUILDINGS

		1,000	00			5,000	00

Such a situation might be handled differently, but if the depreciation reserve account is to retain its character as a valuation account, the foregoing method is the one to be used.

QUESTIONS FOR CLASS DISCUSSION

1. List as many kinds of transactions as you can which affect the account with cash. What is the nature of the voucher which occurs in connection with each such transaction?
2. Mention as many kinds of transactions as you can which affect the account with accounts receivable, telling whether each such transaction results in a debit or credit to the account. What kind of voucher or vouchers is involved in each?
3. What are the debits and credits involved when a business receives a customer's check in payment for an invoice, less discount for cash?
4. On June 5 the Saunders Company sells the firm of Mears & Pierce goods amounting to $700, sending them a sixty-day trade acceptance with the invoice, according to previous agreement. Mears & Pierce accept the draft and return it to the seller. What entry should be made on the books of the Saunders Company?
5. On June 25, the Saunders Company discounts this trade acceptance at the bank at 6 per cent. What entry should be made on their books for this transaction?
6. This trade acceptance matures, and the Saunders Company receives no notice from the bank in regard to it and are therefore relieved from their secondary liability as drawer. Should any entry be made to record this, and if so, what would the entry be?
7. Suppose the Saunders Company had received a notice from the bank that the acceptance had been dishonored by non-payment, and that the company was charged by the bank for the amount of the acceptance

plus a three-dollar protest fee. Is there more than one possible entry that might be made in such a case? If so, give each entry that might be made. Which of them do you prefer, and why?

8. Assuming the acceptance to have gone to protest and to have been paid by the Saunders Company, with the charges, what entry would be made on the books of that company if Mears & Pierce later pay them the amount of the acceptance plus the charges?
9. On December 31, 1919, the Saunders Company decides to allow $125 as the probable amount necessary to cover their losses from bad debts for the period just ended. Give the entry to show this.
10. On February 12, 1920, the Saunders Company discover that an open account carried with one of their customers, having a balance at that time of $50, is absolutely uncollectable. What entry will they make to show their recognition of this fact?
11. What is meant by charging the amount of a given expenditure to *capital?* By charging it to revenue? What difference will it make if an expenditure is charged to capital which should properly have been charged to revenue? If an expenditure properly chargeable to capital is charged to revenue?
12. Of the following expenditures, which do you think are properly chargeable to capital and which to revenue?
    a) Freight-in on machinery purchased for use in factory.
    b) Replacement of window panes broken by a hail storm.
    c) Mechanics wages in making dies for use in manufacturing.
    d) Replacement of roof on building.
    e) Cost of construction of an unloading platform at warehouse.
    f) Repairs on drayage equipment.
    g) Cost of a partition in an office building constructed at request of new tenants.
    h) Cost of demolishing old building on site where a new building is to be constructed.

REFERENCES FOR FURTHER STUDY

PATON, W. A., AND STEVENSON, R. A., *Principles of Accounting*, chaps. vi, xix–xxii.

MITCHELL, T. W., *Accounting Principles*, chap. xviii.

KESTER, ROY B., *Accounting Theory and Practice*, Vol. II, chaps. v, vi, and xi.

STOCKWELL, H. G., *Net Worth and the Balance Sheet.*

WILDMAN, J. R., *Principles of Accounting*, chaps. xvi–xxvii.

GREENDLINGER, LEO, *Financial and Business Statements*, chaps. vii, viii, and ix.

CHAPTER XXIII

THE CONSTRUCTION AND INTERPRETATION OF ACCOUNTS—LIABILITIES

Purpose of the chapter. In chapter viii a brief discussion was given of the current liabilities, as represented by accounts payable and notes payable, the two accounts of this class which appear in nearly every business. In the present chapter some further consideration will be devoted to the accounts with current liabilities, and also to the relatively long-time or "fixed" liabilities.

Current liabilities. As a rule the current liabilities of a business consist chiefly of its liabilities to trade creditors and to the bank. The liabilities to trade creditors assume two forms, open accounts and notes. The liability to the bank or banks is ordinarily represented by notes outstanding. There may, of course, be liabilities on open account to other than trade creditors, and there may be notes due to others beside banks and trade creditors. Whether separate accounts will be carried with such liabilities depends on the importance which they assume.

Accounts Payable. Like Accounts Receivable, Accounts Payable is usually a controlling account. It shows the amount owed by the business to its creditors on open accounts. The items posted to this account are for the most part footings of special columns in the various books of original entry. Accounts with individual creditors are carried in a subsidiary ledger, and may be posted either from the items entered in the books of original entry or directly from the vouchers arising out of transactions with creditors.

The kinds of transactions affecting this account, and the nature of the debits and credits to be made to it, may be indicated as in Accounts Payable, p. 267.

The balance of Accounts Payable account is always on the credit side, and represents the total amount owed by the business on open account to its creditors. At any time when the books are posted to date, this balance should equal the total of the credit balances in the

ACCOUNTS PAYABLE

Debit:	Credit:
With cash paid to creditors in payment of open accounts. With discounts allowed by creditors for cash payments. With the invoice value of goods returned to creditors. With the amount of any credit allowed the business by a creditor for freight or other charges on goods returned. With all allowances and rebates allowed by creditors for any reason whatever.	With the total of all invoices of goods purchased on account.

individual creditor's accounts. It is desirable that the two amounts should be compared at the end of each month, or as often as the books are completely posted up to date; and where a discrepancy is found to exist, it should be traced to its source and the necessary corrections made.

As has been suggested, there may be a considerable number of items other than merchandise which are purchased on open account. It is sometimes considered desirable to keep the amount of liability incurred for such items separate from that incurred for merchandise. In such a case two accounts would be carried with accounts payable, one of which would be called "Accounts Payable—Trade Creditors," and the other one "Other Accounts Payable." Such a separation of accounts payable is not usually considered necessary.

Notes Payable. The nature of the account with notes payable has already been explained rather fully. This account shows the total of the face of all the notes issued and time drafts accepted by the business which remain unpaid and outstanding. The transactions affecting this account, and the nature of the debits and credits to be made to it, may be shown as follows:

NOTES PAYABLE

Debit:	Credit:
With all amounts paid in settlement of notes or drafts outstanding.	With the face value of all promissory notes issued by the business to its creditors. With the face value of all time drafts accepted by the business.

The balance of Notes Payable account represents at any time the face value of all the notes and drafts outstanding against the business at that time. This does not mean that only one account with notes payable may be used, if the need for a division or classification of such notes exists. A business may secure credit from trade creditors in some cases by giving notes or trade acceptances. The same business may borrow money from the bank on its notes to enable it to take the discounts offered by other creditors for cash payments. In such a case there might well be a distinction made between the two classes of notes outstanding, according to the class of creditors who hold them. Such a distinction would involve the use of two accounts with notes payable: (1) "Notes Payable—Trade Creditors," and (2) "Notes Payable—Banks."

Occasionally it occurs that money is borrowed for a short term from someone other than the bank. Such borrowing might be from a partner in the business, an officer in the corporation, or some friend or relative of the proprietor or member of the firm who is in a position to make the business a short-time loan on its note. In such a case still another notes payable account will be required. The title of such an account should indicate its nature, as "Notes Payable—Others," "Notes Payable—Partners," or "Notes Payable—Officers." There is no need for any further discussion of the nature of such an account, or of the debits and credits to be made to it, since it does not differ in that respect from the general account with notes payable, which has already been discussed.

Fixed liabilities. In addition to the lines of short-term credit which business concerns ordinarily secure from their trade creditors and from the banks, it is often found desirable to secure the use of funds for a longer period. Such funds may be secured from additional investment by the owners, or by admitting new members into the owning group, as by admitting an additional partner who would bring in a certain amount of investment, or by issuing additional capital stock to outsiders, in the case of a corporation. In case none of these courses seem desirable, the money may be secured by long-time borrowing from outsiders. Such borrowing gives rise to long-time or *fixed* liabilities, certain types of which will be considered at this point.

Mortgages Payable. Where the borrowing concern is a single proprietorship or a partnership, this long-time borrowing is usually done by means of an interest-bearing note, secured by a mortgage. This means that a formal written and sealed instrument is delivered to the lender, giving him a lien for the amount of the note and for any cost incurred in collecting it, on certain specified property of the borrower. Failure on the part of the borrower to pay either principal or interest when due gives the mortgage-note holder the right to foreclose on the property named in the mortgage, sell it at auction, and reimburse himself from the proceeds. Long-time borrowing of this sort may be for one or more of the following purposes: (1) increasing the amount of fixed assets; (2) refunding outstanding long-time liabilities; (3) increasing the amount of current assets; (4) funding current liabilities.

The account representing such a liability as the one just described is called *Mortgages Payable.* The nature of the transactions affecting this account, and the debits and credits to be made to it, may be summarized as follows:

MORTGAGES PAYABLE

Debit:	*Credit:*
With all payments made on mortgage notes payable. With the face value of mortgage notes payable canceled in any manner.	With the face value of all long-time notes issued by the business and secured by mortgages.

The balance of this account is on the credit side, and shows the face value of all long-time notes secured by mortgages which are outstanding against the business.

Bonds Payable. If the borrowing concern is a corporation, its long-time borrowing is usually accomplished through the sale of *bonds.* Thus when it has been decided by the corporation to issue bonds up to a certain amount, a formal agreement as to the terms of the issue is made with some bank or trust company whose duty it is to protect the interests of the purchasers, and the bonds are then offered for sale. In a few states it is necessary for the issuing company to secure the sanction of a state regulatory body of some sort as a prerequisite to offering the bonds for sale. The largest of such issues are usually marketed through some investment company or bond

house, or through a syndicate of such investment banking establishments.

The bonds are printed in convenient denominations, ranging usually from $100 to $10,000. Each bond has printed on it a brief statement of the terms of the contract between the issuing company and the investor. This contract may vary widely in different bond issues with regard to the nature of the security, interest rate, convertibility into other securities of the company, redeemability, etc. Thus a bond issue may be secured by a mortgage on any or all of the fixed assets of the company, or by no mortgage at all. The only limits to the variations that may appear in such contracts are: (1) what the law will permit, and (2) what the investors will accept.

The interest on bonds outstanding is a fixed charge against the issuing company. Upon its failure to make payment of the principal or interest when due, the trustee for the bondholders may act to secure a foreclosure on the property of the company subject to such foreclosure by the terms of the bond, or may petition the courts for the appointment of a *receiver* for the company. The receiver will take charge of the affairs of the company and act to protect the interests of the bondholders and other creditors. Such a receivership may involve a liquidation of the company's assets and a closing up of its affairs, or it may involve a *reorganization*, for the purpose of continuing the business operations in such a manner as to protect the creditors' interests.

The account with *Bonds Payable* shows the total face value of the company's bonds outstanding. The debits and credits to this account are as follows:

BONDS PAYABLE

Debit:	*Credit:*
With the face value of all bonds redeemed or otherwise retired.	With the face value of all bonds sold or otherwise issued.

Where a company has several issues of bonds outstanding, a separate account will usually be carried in the ledger for each such issue. On the balance sheet of the issuing company the amount of each such issue may be shown as a separate item, but more usually only one item of bonds payable is shown, this representing the total of all such

issues outstanding. The balance of any account with bonds payable represents the face value of such bonds outstanding at the time.

Long-term notes. Corporations often issue notes for periods which are relatively short as compared with the maturity of the average bond, but longer than that of the ordinary note, such as is given to the bank or to a trade creditor. The maturity of these notes is usually from one to five years from the time of their issue. The purpose of selling such notes is usually to secure fixed capital at a time when the investment market is not considered favorable to an issue of long-term bonds, it being the expectation that bonds will later be issued to take their place. These notes are not different from bonds except in the length of the term for which they are issued, being issued and marketed in exactly the same manner. They are not usually secured by mortgages, but depend for their salability on the earning power and general credit of the company.

The accounts which will be carried with such notes outstanding are similar to the account with any issue of bonds, except that the title indicates the type of the issue. The nature of such an account may be indicated as follows:

1925 FIVE-YEAR 7 PER CENT GOLD NOTES

Debit: With the face value of all such notes redeemed or otherwise retired.	*Credit:* With the face value of all such notes sold or otherwise issued.

The balance of such a notes account as the foregoing shows at any time the face value of all such notes issued and outstanding at that time.

QUESTIONS FOR CLASS DISCUSSION

1. In a well-managed wholesale business, which should you expect to be normally the larger item, Notes Payable or Accounts Payable? Why?
2. Under what circumstances should you carry more than one account with Notes Payable? What purposes would be served by such subdivision of this account?
3. What are some of the purposes for which long-time liabilities are incurred?
4. In what forms may long-time liability be incurred? What similarities have these various forms? What difference?

5. The A Company cannot pay the interest on its first mortgage bonds. What course of action is open to the bondholders? What factors will determine the policy which they should follow?
6. In 1920 the B Company has the alternative of issuing fifteen-year mortgage bonds, yielding $6\frac{3}{4}$ per cent, or five-year gold notes yielding $7\frac{3}{8}$ per cent. They choose to issue the notes. Why?
7. The Consolidated Gas Company has outstanding the following securities:

   Equipment trust certificates
   Collateral trust bonds
   First mortgage sinking fund gold bonds
   Consolidated and refunding mortgage bonds

   Judging from the titles, what should you suppose to be the distinguishing characteristics of each of these issues?
8. Assume that you are the treasurer and auditor of the Fabrikoid Manufacturing Company. The president proposes the issue of $500,000 of ten-year gold notes, for the purpose of liquidating that amount of current liabilities. What facts would you require before you could advise him with regard to the wisdom of this proposal?
9. You are employed by a bond house. You are asked to give your opinion of the wisdom of the participation by your house in a new issue of bonds, amounting to $3,000,000. You find that the earnings of the issuing company for the past five years have not been very satisfactory, but that the bonds are secured by a closed first mortgage on the plant and equipment of the company, valued at $6,000,000. This plant and equipment is new and highly specialized. What do you think your answer would be? Is there any additional information which you would require?
10. The treasurer of a company talks of a proposed issue of five-year notes for the purpose of "funding current liabilities." Explain and comment.

REFERENCES FOR FURTHER STUDY

Wildman, J. R., *Principles of Accounting*, chap. xxix.
Stockwell, H. G., *Net Worth and the Balance Sheet*, chaps. xvii–xxii.
Greendlinger, Leo, *Financial and Business Statements*, chap. xiii.

CHAPTER XXIV

THE CONSTRUCTION AND INTERPRETATION OF ACCOUNTS—PROPRIETORSHIP ACCOUNTS

Purpose of the chapter. From the beginning of the course it has been pointed out that the proprietorship in any business is the difference between the total assets and the total liabilities. It has also been shown that, since this proprietorship or net worth must be reported on the balance sheet, one or more accounts must be carried in the ledger to show the status of the net investment. The accounts maintained for this purpose will differ somewhat in their titles, their number, and their construction, according to the form of organization under which the business is conducted. In the present chapter consideration will be given to the kinds of proprietorship accounts used in connection with the three main forms of proprietorship under which business is conducted: the single proprietorship, the partnership, and the corporation.

Proprietorship accounts for the single proprietor. An adequate discussion of the proprietorship accounts ordinarily used in a single proprietorship business was given in chapter vi. It is enough to recall that in such a business the two accounts with proprietorship which are ordinarily used are: (1) proprietor, capital account; (2) proprietor, personal account. The proprietor's capital account is used to show the status of his investment in the business. It is debited and credited as follows:

PROPRIETOR, CAPITAL

Debit:	*Credit:*
With all withdrawals of investment.	With the amount of the proprietor's original investment.
With the amount of the net loss for the accounting period, in case such a loss exists.	With any additions made to the original investment.
With the debit balance of his personal account at the end of the period.	With the amount of net profits ascertained at the end of the accounting period.

The balance of this account, as already indicated, represents the amount of the proprietor's net investment in the business at the time. As long as total assets exceed total liabilities, this will be a credit balance. If assets should become less than liabilities, the balance of the account will appear on the debit side and will represent a deficit.

The proprietor's personal account. The proprietor's personal account is generally used to show the amount of his drawings for the period, and the amount subject to his withdrawal at any time. As stated in chapter viii, the proprietor often allows himself a stated salary, the amount of which is debited to operating expense for the period, and credited to his personal or drawing account. His personal account will show whether he has drawn more or less than the amount of his salary allowance. If this account shows any very considerable overdraft as against his salary allowance, it may be closed into his capital account at the end of a period, to show a decrease in his total investment. The debits and credits to the proprietor's personal account may be indicated as follows:

PROPRIETOR, PERSONAL

Debit:	*Credit:*
With amounts drawn by the owner against anticipated current profits, or against a stipulated salary allowance.	With the periodical allowance made to the owner as salary.
With the amount of the credit balance of this account whenever it is desired to close such balance into the proprietor's capital account.	With the amount of the debit balance of this account whenever it is considered desirable to close it into the proprietor's capital account.

The balance of this account may be either a debit or a credit balance. If a credit, it shows the amount of the proprietor's salary allowance which is still undrawn. If a debit, it shows the amount by which he has overdrawn the credit from this source. In stating the net proprietorship on the balance sheet, the amount of the balance of the personal account may well be combined with that of the capital account to show the proprietor's total net ownership at that time. This combination is usually effected by a journal entry at the end of the fiscal period, closing the balance of the personal account into the capital account.

Proprietorship accounts in the partnership. Where there is more than one proprietor and the business is carried on as a partnership, the accounts with proprietorship are very similar to those just discussed except that there must be a separate capital account and a separate personal account for each of the partners.

Whether the partners are to be credited periodically with a stated salary, and what the amount of such salary shall be for each one, should be determined by the terms of the partnership agreement. The agreement should also state whether each partner is to be credited with interest on the amount of his investment before a division of profits is made, and what ratio is to be used in dividing profits or losses among the partners. The provisions of the agreement of each of these points must be considered before any disposition of net profits is made at the end of an accounting period. If there is no formal agreement, or if the agreement is silent on these points, then no allowance is to be made for either salary or interest, and profits and losses will be shared equally among the partners, regardless of the amount of the investment of each.

The nature of a partner's capital account, and the kinds of changes for which it will be debited and credited, may be indicated as follows:

JOHN DOE, PARTNER, CAPITAL

Debit:	*Credit:*
With all withdrawals of the partner's investment. With the partner's share of net losses for an accounting period.	With the amount of the partner's original investment. With all additional investments made by the partner. With the amount of any undrawn credit balance transferred from the partner's personal or drawing account. With the amount of any net profits accruing to the partner in excess of salary and interest allowances, which may be carried directly to the partner's capital account.

The partner's drawing account. The personal account of a partner is usually known as his *drawing* account. Like the personal account of the single proprietor, it is debited with all amounts drawn by the partner for personal use.

If the agreement provides for salary allowances, these will be charged to expense on the same basis as any other salaries, and credited to the drawing accounts at the end of the period, along with any interest allowances that may be made. The matter of interest allowances is one which is discussed in nearly every accounting text, but seldom if ever encountered in practice. The kind of transactions which may affect a partner's drawing account, and the nature of the debits and credits which may be made to such an account, may be indicated as follows:

JOHN DOE, PARTNER, DRAWING ACCOUNT

Debit:	*Credit:*
With amount of all drawings made by the partner for personal use. With any undrawn credit balance transferred from this account to the partner's capital account, as an addition to his net investment.	With periodical allowance for partner's salary, if such allowance is provided. With allowances for interest on the partner's investment, if this is provided for in the agreement. With the amount of any debit balance in this account which is transferred to the partner's capital account to show a reduction in his net investment.

If the balance of this account appears on the credit side, it shows the amount which the partner is still entitled to withdraw from the business without affecting his capital investment. If it appears as a debit balance, it shows the amount by which he has overdrawn his personal allowances. Any considerable credit balance which accumulates in this account may be transferred to the partner's capital account in case the partnership agreement permits and the partner in question so desires. Also, the amount of any considerable overdraft shown by a debit balance in the drawing account may be transferred to his capital account to show a reduction of his long-time investment, if the circumstances make this seem desirable.

On the balance sheet, the balance of the partner's drawing account is added to that of his capital account to show his total proprietorship if the drawing account has a credit balance, and deducted from the balance of the capital account if the drawing account shows a debit balance.

Proprietorship accounts in the corporation. Something of the nature of the corporate form of organization for conducting a business enterprise was discussed in chapter ii. It was there pointed out that the corporation is a legal entity entirely apart from its individual stockholders. This means that although the total proprietorship of the stockholders in the corporation will be ascertained in exactly the same way as the total proprietorship of the partners or the individual proprietor, it will not be stated in quite the same way in the accounts or on the reports. The proprietorship of individual owners will not be shown in separate ledger accounts, as in the case of the single proprietorship or the partnership. It will be shown rather by a few general accounts in the ledger, while a subsidiary record known as a "stock ledger" furnishes the names of the individual stockholders and the number of shares of each kind of stock which each holds. The proprietorship accounts which are carried in the general ledger of the corporation are typically classified as follows: (1) Capital Stock: (*a*) Preferred Capital Stock, (*b*) Common Capital Stock; (2) Surplus (general); (3) Reserves (special appropriations of surplus). These accounts will be taken up for discussion in the order in which they are listed above.

Capital stock. Contributions of capital by the prospective proprietors in the corporation take the form of the purchase of shares of stock. At the time when the corporation is organized authorization is secured from the proper authorities for the issue of a certain number of shares of stock, each such share usually having a definite par value, although this is not always the case. Part or all of these shares are then subscribed for, and are issued in exchange for cash or other property paid to the corporation. If the authorized stock is not all issued at the outset, the remainder may be issued at a later time, when further investment is required, or when the market is more favorable. Also, authorization may be secured for stock issues in addition to those originally contemplated.

In case the stock has a definite par value, it may be issued (1) in exchange for cash or other property equal in value to the par value of the stock (issued *at par*); (2) in exchange for property whose value is less than the par value of the stock (*issued at a discount*); (3) in exchange for property whose value is in excess of the par value of the stock (*issued at a premium*).

Regardless of the value of the assets received in exchange for the stock issued, if this stock has a par value, the capital stock account will always show the exact par value of the shares of stock which are issued and outstanding. It is desirable to preserve in this account the par of the stock issued, not only for legal reasons, but because it serves as the basis for dividends, and enables a reader of the balance sheet to calculate the amount of ownership represented by a single share of a given par value. The nature of the account with capital stock, and of the debits and credits to be made to that account, may be indicated as follows:

CAPITAL STOCK

Debit:	*Credit:*
With the par value of all shares of stock redeemed by the corporation, or otherwise retired.	With the par value of all shares of stock issued by the corporation.

The balance of this account always appears on the credit side, and represents the par value of the stock then outstanding.

Contracts entered into between the corporation and the stockholders may be of various kinds. Thus a corporation may issue not only *common* stock, entitling the holders to certain specified rights, but also *preferred* stock, which enjoys certain preferences as to dividends, and in many cases in its claim on the assets of the company in case of dissolution. Also, there may be more than one class of common, and more than one class of preferred, stock, the classification in each case depending on the terms of the contract. Where there is more than one class of stock outstanding, an account will be carried in the general ledger with each such class. Thus the capital stock accounts of a given corporation might be classified as follows: First Preferred Capital Stock; Second Preferred Capital Stock; First Common Capital Stock; Second Common Capital Stock. Since each such account is only a subdivision of the capital stock account, its nature and the debits and credits to be made to it are in no way different and do not need to be repeated at this point.

Discount on stock. In case the stock is originally issued for assets whose value is less than the par of the stock, it will be necessary to carry a valuation account to show the amount by which the par of the capital stock outstanding exceeds the actual investment. Such an

account is called *Discount on Stock,* and debits and credits are to be made to it as follows:

DISCOUNT ON STOCK

Debit:	Credit:
At time stock is issued with excess of par of stock issued over value of assets received.	With amount of current net profits transferred to this account to reduce its balance. With amount of any portion of surplus transferred to this account to reduce its balance.

The balance of such an account will be a debit, and represents the excess of the par value of the stock outstanding over the actual investment represented by that stock. It should be written off, as indicated above, by the appropriation of net earnings for that purpose.

The issue of stock at a premium will be considered under the discussion of surplus.

Surplus. If the operations of the corporation are successful, net profits will be earned. If these profits are not all withdrawn (and usually they are not), the proprietorship of the corporation will increase to an amount in excess of the par of the stock outstanding. This increased proprietorship cannot be reflected by the capital stock account, which shows only the par of the stock. Such an excess of total proprietorship over capital stock is shown by a *surplus* account. The nature of the debits and credits to be made to the surplus account may be shown as follows:

SURPLUS

Debit:	Credit:
With the amount of all appropriations made of surplus for any purpose, such as dividends, reserves, and the like. With the amount of any recognized decrease in proprietorship, resulting from operating of other losses.	At the end of the fiscal period with amount of all current net profits not otherwise appropriated.

The balance of this account must always be on the credit side, and represents the amount by which the net investment not appropriated for any special purpose exceeds the par value of the capital stock outstanding. If for any reason the net proprietorship falls below the par of the stock outstanding, the surplus account will be closed out, and an account of the opposite nature, headed "Deficit," or some such appropriate title, will be set up to show the deficiency.

Where stock is issued at a *premium*, the amount by which the original investment exceeds the par value of the stock issued is usually entered in a special surplus account, known as *Capital Surplus*, or *Contributed Surplus*. The analysis of this account may be indicated as follows:

CAPITAL SURPLUS

Debit:	*Credit:*
With the amount of any appropriation made of this surplus, such as an offset to stock later issued at discount.	With the amount by which assets received in exchange for capital stock issued exceed the par value of such stock.

The balance of this surplus account will be on the credit side, and represents the excess of capital contributed by the stockholders over the par value of the stock issued. The amount of such surplus, representing as it does original contributions of capital, is not ordinarily considered to be available for distribution as dividends.

Proprietorship reserves. In discussing the surplus account it was stated that the balance of that account represents the amount of the surplus which is not appropriated for any special purpose. Whenever any portion of surplus or of current net profits is appropriated for a particular purpose, the amount so appropriated is transferred to the credit of some *proprietorship reserve* account. Examples of accounts with such proprietorship reserves are: Reserve for Addition to Plant, Reserve for Redemption of Bonds, and Sinking Fund Reserve. Such accounts are here designated as *proprietorship* reserves in order to distinguish them from the so-called "reserve" accounts which really represent valuations on assets, or deductions from the balance carried in some asset account. Such valuation reserve accounts are Reserve for Bad Debts and Reserve for Depreciation.

Reserve for Addition to Plant may be taken as representative of proprietorship reserve accounts. The nature of this account, and the debits and credits to be made to it may be indicated as follows:

RESERVE FOR ADDITION TO PLANT

Debit:	*Credit:*
With the value of assets applied to the accomplishment of the purpose for which the reserve was appropriated (to transfer such amount back to the general surplus account).	With the amount of surplus or current net profits appropriated for the purpose indicated by the title of the account.

The balance of such a reserve account shows the amount of that part of the total proprietorship which has been appropriated to the designated purpose and which has not yet been applied to the accomplishment of that purpose. Such a balance will appear on the credit side of the account.

Proprietorship reserves are to be considered as a portion of surplus, but as a portion appropriated for a specific purpose and therefore not available for dividends. The capital stock account or accounts, the general surplus account, and the proprietorship reserve accounts are to be taken together to show the total of the proprietorship in the corporation, and should therefore be grouped together on the balance sheet for this purpose.

QUESTIONS FOR CLASS DISCUSSION

1. What is the purpose of the proprietor's capital account? What entries may be made to this account?
2. What transactions would affect the personal account of the proprietor? How should you show the balance of this account on the balance sheet?
3. Are the differences between the proprietorship accounts of the partnership and those of the single proprietor marked enough to merit discussion?

   If so, what are these differences, and why do they exist?
4. What is there about the nature of a corporation that causes its proprietorship accounts to be different from those of the partnership of the single proprietor?
5. Why should the amount of capital stock outstanding always be shown at par? When should there be more than one class of capital stock?
6. What is the purpose of the account with discount on stock? How should it appear on the balance sheet?
7. What record is made when stock is issued above par? How will this fact be shown on the balance sheet?
8. What is the nature of the surplus account? Could this account have a debit balance? Why, or why not? Can you identify any particular group of assets with the surplus account?
9. What is a reserve? Is there more than one kind of reserve account? If so, what are the distinguishing features of each kind? Which is more properly known as a "reserve" account?
10. Must a reserve account be identified with a particular group of assets? May it be so identified? Under what circumstances would this be desirable?

11. Name as many so-called "reserve" accounts as you can, and discuss briefly the nature and purpose of each.
12. You are engaged to audit the accounts of the X Company, which has been in operation for one year. You find that the accounts show capital stock outstanding (all common) to be $500,000, and surplus account has a balance of $150,000. Upon inquiry you learn that $100,000 of this was contributed by the stockholders, who subscribed to the stock at a premium of 20 per cent. Should you suggest any modification of the accounts? If so, give the journal entry required to put these modifications into effect. Justify any recommendation which you would see fit to make in regard to this matter.

REFERENCES FOR FURTHER STUDY

WILDMAN, J. R., *Principles of Accounting*, chaps. xxx, xxxi, xxxii.
HATFIELD, H. R., *Modern Accounting*, chaps. viii, ix, xiii, xiv.
DICKINSON A. L., *Accounting Practice and Procedure*, pp. 127–33.
STOCKWELL, H. G., *Net Worth and the Balance Sheet*, chaps. xxiii–xxvi.
GREENDLINGER, LEO, *Financial and Business Statements*, chaps. xii, xiv, xv.

LABORATORY EXERCISE NO. 33

W. C. Harvey has decided to put in a stock of furniture along with his hardware. He does not think that it would be worth while to attempt any division of the operating expenses of the business with regard to whether they are chargeable against the income from the sale of hardware or of furniture, but he does wish to know the gross profit from each of the two classes of sales separately. This means that you will need to carry two inventory accounts, two purchases accounts, two sales accounts, two accounts with in-freight, two with sales returns and allowances, and two with purchase returns and allowances. The additional analysis thus required will make necessary some modification in the form and number of the books of original entry. In addition to the general journal, which is always indispensable, the books of original entry to be used in this exercise may be outlined as follows:

Purchases Journal. Use columnar journal paper, and provide columns as follows: (1) Date, (2) Name, (3) Address, (4) Terms, (5) Invoice Number, (6) Folio, (7) Accounts Payable, Cr., (8) Hardware Purchases, Dr., (9) Furniture Purchases, Dr. All purchases of merchandise, on any terms whatever, will be entered into this journal, the amount of the invoice being credited in each case to Accounts Payable. In case the purchase is really paid for immediately by cash or by a note, the payment would be recorded elsewhere and posted to the debit of Accounts Payable. The posting from this form of purchases journal is the same as that for the form used in the last exercise, except that there are two purchases accounts instead of one.

Purchase Returns and Allowances Journal. Use the same kind of paper, with columns as follows: (1) Date, (2) Name, (3) Address, (4) Terms, (5) Invoice Number, (6) Folio Number, (7) Accounts Payable, Dr., (8) Purchase Returns and Allowances (Hardware), Cr., (9) Purchase Returns and Allowances (Furniture), Cr. The posting procedure for this journal is the same as for the purchases journal, except that the debits and credits are in each case directly reversed.

Sales Journal. Use columnar journal paper. Provide columns as follows: (1) Date, (2) Name, (3) Address, (4) Terms, (5) Invoice Number, (6) Folio Number, (7) Accounts Receivable, Dr., (8) Cash, Dr., (9) Hardware Sales, Cr., (10) Furniture Sales, Cr. The "Cash, Dr." column is included for purposes of analysis, and to make this journal balance. Its footing is not to be posted, since all debits to cash will be included in the cash book. Otherwise the posting is as indicated by the form of the journal.

Sales Returns and Allowances Journal. Columnar journal paper. Columns as follows: (1) Date, (2) Name, (3) Address, (4) Terms, (5) Invoice Number, (6) Folio Number, (7) Accounts Receivable, Cr., (8) Cash, Cr., (9) Hardware Sales Returns and Allowances, Dr., (10) Furniture Sales Returns and Allowances, Dr. Here again the "Cash, Cr." column is not to be posted. All cash refunds for returns and allowances are to be shown in the cash book, as well as all cash sales. The credits to Sales, and the debits to Sales Returns and Allowances, will not be posted from the cash book, but from the sales journal and the returns and allowances journal. In the cash book a check will be placed in the folio column opposite each such item, to indicate that it is not to be posted from that book.

Cash Receipts Journal. Use columnar journal paper. Columns as follows: (1) Date, (2) Account Credited, (3) Explanation, (4) General Ledger Folio, (5) Accounts Receivable Folio, (6) Sundry Accounts, Cr., (7) Accounts Receivable, Cr., (8) Sales, Cr., (9) Cash, Dr. In the column for "Sundry Accounts, Cr." will be entered the credits to all accounts for which special columns have not been provided. Each of the credits in this column must be posted to the general ledger separately, entering the folio number in the "General Ledger Folio" column. As was previously explained, the footing of the "Sales, Cr." column is not to be posted. The rest of the posting follows the procedure already familiar to the student.

Cash Disbursements Journal. Use columnar journal paper. Columns as follows: (1) Date, (2) Account Debited, (3) Explanation, (4) General Ledger Folio, (5) Accounts Payable Folio, (6) Sundry Accounts, Dr., (7) Accounts Payable, Dr., (8) Cash Discount on Purchases, Cr., (9) Cash, Cr., (10) Delivery Expense, Dr., (11) Office Expense, Dr. The "Sundry Accounts, Dr." column in this form is used in the same manner as that indicated in the discussion of the corresponding column in the cash receipts journal. The posting to the accounts debited in this column, and the

posting to the individual accounts in the creditor's ledger, is the only detailed posting to be made from this journal. The footings of all the other columns are to be posted as indicated by the column headings.

Transactions for May

May 1

Received a check from J. Gunderson for $225.00, the amount of his account to date. Received from Boutell Furniture Co., St. Paul, an invoice for a shipment of furniture, $900.00, 2/10/n/60. (Open separate account with furniture purchases.) Paid freight on this shipment, $25.00. (Also open separate account for in-freight, furniture.) Cash sales, hardware, $95.00.

May 2

Sold William Gibson on account $205.00, hardware. Sold Charles Robinson hardware on account, $95.00. Paid rent of store for May, $125.00. Cash sales hardware, $72.00.

May 3

H. Greiner paid his account in full to date, $294.50. Paid $50.00 for stamps. Paid bills as follows: light, $9.40; telephone, $6.00; telegrams, $8.90. Cash sales, hardware, $65.00.

May 4

Sold Howard Jones furniture on account, $250.00. Sold Andrew Anderson hardware on account, $100.00. Paid Hibbard, Spencer, Bartlett's invoice of April 26, less discount. Paid salaries, same as last week (Week ended April 27.) Withdrew $40.00 for personal use. Cash sales, hardware, $60.00; furniture, $40.00.

May 6

Sold Thomas Dodge hardware on account, $140.00. Sold John Wright, furniture on account, $65.00. Received invoice from Marshall-Wells Hardware Co., $350.00, 2/10/n/30. Paid freight on this shipment, $7.50. Cash sales, hardware, $65.00.

May 7

Received from Simmons Hardware Co. notification of a credit for goods returned to them out of invoice of April 29, $95.00. Sold Charles Clayton furniture on account, $75.00. Sold Jacob Gunderson hardware on account, $80.00. Cash sales, hardware, $53.00; furniture, $35.00.

May 8

Received invoice from New England Furniture Co., Detroit, Mich., $450.00, 2/10/n/60. Paid $12.00 freight on this shipment. Sold E. F.

Hughes furniture on account, $95.00. Cash sales, hardware, $67.00; furniture, $90.00.

May 9

Paid balance due on Simmons Hardware Co.'s invoice of April 29, less discount. Sold H. Rowe hardware, $125.00, on account. Cash sales, hardware, $55.00; furniture, $25.00.

May 10

Discounted our sixty-day note for $1,000.00 at the bank, at 6 per cent. Sold Charles Clayton furniture on account, $110.00. Paid for advertising in the local paper, $45.00. Cash sales, hardware, $87.00; furniture, $24.00.

May 11

Paid salaries for the week, including an additional sales clerk at $22.00. Withdrew $50.00 for personal use. Paid Boutell Furniture Co.'s invoice of May 1, less discount. Sold Howard Strong hardware on account, $85.00. Cash sales, hardware, $67.00; furniture, $30.00.

May 13

Received invoice from Huron Supply Co. for wrapping paper and twine, $125.00, net. Paid a garage bill of $17.00. Sold John Wright hardware on account, $40.00. Charles Robinson paid his account to date. Cash sales, hardware, $78.00; furniture, $24.00.

May 14

Sold Charles Robinson hardware on account, $45.00. Paid for advertising circulars, $25.00. Paid $5.00 for their distribution. Cash sales, hardware, $60.00; furniture, $41.00.

May 15

Charles Clayton made a claim that certain goods purchased by him on May 10 were inferior in quality. He was allowed $15.00. Sold James Freeman furniture on account, $90.00. Cash sales, hardware, $70.00; furniture, $15.00.

May 16

Sold D. W. Kelly hardware on account, $15.60. Sold C. E. Pierce furniture on account, $300.00. Cash sales, hardware, $105.00. Paid Marshall-Wells Hardware Co.'s invoice of May 6, less discount.

May 17

Received a memorandum from the New England Furniture Co., allowing our claim for $15.00 for defective goods, $75.00 for goods returned. Sold H. Greiner hardware on account, $120.00. Cash sales, hardware, $67.50; furniture, $32.90.

May 18

Paid balance on New England Furniture Co.'s invoice of May 8, less discount. Withdrew $50.00 for personal use. Cash sales, hardware, $83.00; furniture, $37.50.

May 20

Paid salaries, same as last week. Received invoice from Lindell and Evans, Grand Rapids, Mich., for furniture, $375.00, 2/10/n/30. Sold E. F. Hughes hardware on account, $47.50. Cash sales, hardware, $68.00; furniture, $17.50.

May 21

Sold Herman Rowe builders' hardware, on account, f.o.b. his station, $250.00. Paid freight on the same, $3.00. Paid $4.50 for repairs on typewriter. Cash sales, hardware, $74.00; furniture, $45.00.

May 22

Bought stationery amounting to $18.00. Peter Henderson paid his account in full. Sold James Freeman hardware on account, $35.00. Cash sales, hardware, $56.00; furniture $38.00.

May 23

Received of Western Supply Co. invoice for additional showcases, $75.00, n/15. Paid $7.50 for installation of same, and freight on the shipment, $6.00. Sold Adam Jones hardware on account, $48.00. Cash sales hardware, $72.00.

May 24

Cash sales, hardware, $37.50; furniture, $25.00.

May 25

Received invoice for hardware from W. D. Allen Co., $250.00, 2/10/n/30. Paid salaries same as last week. Withdrew $50.00 for personal use. Cash sales, hardware, $87.50; furniture, $35.00.

May 27

Refunded $25.00 on furniture bought for cash and returned. Sold N. I. Cluff furniture on account, $122.00. Cash sales hardware, $79.00.

May 28

Paid the *Daily News* for advertising, $20.00. Cash sales, hardware, $71.00; furniture, $55.00.

May 29

Sold Peter Henderson hardware on account, $63.00. H. Rowe returned goods purchased May 21, $20.00. Cash sales, hardware, $45.00; furniture, $27.50.

May 30

Paid Huron Supply Co.'s invoice of May 13, net. Sold Dr. D. Kelly furniture on account, $105.00. Cash sales, hardware, $57.00.

May 31

Cash sales, hardware, $68.00; furniture, $50.00.

Take the totals of all the columns in your special books of original entry. Make sure that the total of the debit columns in each journal equals the total of the credit footings. (For purposes of this checking subtract the beginning cash balance from the total of the debits in the cash receipts journal.) Rule up these special books of entry and complete all posting, both to the general ledger and to the subsidiary ledgers. Make sure that the balances of your two controlling accounts agree with the totals of the balances in the subsidiary ledgers.

Our thirty-day note, which was discounted by the Woodlawn Trust and Savings Co. on April 25, matured on May 25. It was not paid on that date, but was renewed by giving them our new note for $500 at thirty days, with interest at 6 per cent. Through an oversight, this transaction was left off the books. Make the necessary entries as of May 31.

The merchandise inventories on May 31 are as follows: hardware, $4,560.00; furniture, $525.00. Store supplies on hand (paper, twine, etc.) are valued at $90.00. Salaries are accrued for five days. An allowance for bad debts is to be made equal to 1 per cent of the total amount at present due from customers. Depreciation on each class of equipment is to be taken at the same rate as was indicated last month.

On the basis of this information and of your own investigation with respect to the interest prepaid or accrued on the various notes receivable and payable, and as to the amount of insurance expired, prepare the balance sheet and the statement of profit and loss.

Make in the journal the entries necessary to bring the ledger accounts into agreement with the items shown in the reports (adjusting entries) Post these entries.

Make and post the entries necessary to close the books.

Note.—For those who desire further laboratory material, an additional month's transactions are given in the appendix on page 379.

CHAPTER XXV

THE CONSTRUCTION AND INTERPRETATION OF ACCOUNTS—INCOME ACCOUNTS

Kinds of income accounts. There are two classes of income accounts, so clearly set apart from each other that they appear in different parts of the profit and loss statement. They are: (1) accounts with operating income; (2) accounts with "other income," or non-operating income accounts. By "operating income" is meant the income derived from the operations for which the business is organized, and to which the management may look for the chief source of income. This sort of income arises from the sale of the goods or services in which the particular business deals, the nature of such goods and services varying with the type of the business enterprise.

The non-operating income of any business is that income which accrues to the business from sources other than those upon which the business depends for its primary income. An example of such non-operating income is the rent received from a building or other real estate held by the business as an incidental investment. Interest earned on notes and investments held, or on bank balances, is non-operating income to any but a financial business. Almost any item of income may be either operating or non-operating income, according to the nature and purpose of the business in which such income accrues.

Accounts with operating income. It was pointed out above that there may be several kinds of operating income in connection with as many kinds of business. Thus in the case of a railroad, accounts would be needed to show income from passenger traffic, freight traffic, and earnings from express and mail business. In connection with a hotel the main operating income is usually the rent of the rooms. But for the present it is not necessary to give consideration to types of business other than the ordinary mercantile and manufacturing businesses, in which operating income arises from the sale of goods and may be represented by one or more sales accounts.

Sales account. Thus in a manufacturing or mercantile business there will always be a sales account in which will be recorded the amount of the sales made during each accounting period, and the

balance of this account at the end of the period shows the amount of operating revenue from this source during the period. From this the operating expenses must be deducted in order to ascertain the net operating profit or loss.

If the business sells different lines of commodities, or if it is organized into several departments, each of which is making sales, the sales account will be subdivided to show whatever classification of sales may be desirable for the particular organization. Thus a mercantile business with several departments may have its sales account divided into "Sales—Department A," "Sales—Department B," and a similar account for every other selling department. A manufacturing concern making and selling three lines of product may have a sales account for each, as follows: "Sales—Product No. 1," "Sales—Product No. 2," "Sales—Product No. 3." It is also possible that the departmental or product sales accounts may be further classified. There might be a sales account to show the amount of the sales of each of the three products in each of the territories in which the manufacturing concern markets its goods. This matter of the subdivision of the sales account is one of classification, and anything like an adequate consideration of the subject must be deferred to a later point in the study of accounting.

The nature of any subsidiary sales account is exactly the same as that of the general sales account which shows the total sales. To show the construction and interpretation of accounts with sales, then, it is not necessary to consider more than one such account. The debits and credits to the sales account are as seen on page 290.

It will be seen from the foregoing discussion that the balance of the sales account before any of the closing entries have been made and posted will be a credit balance, and will represent the amount of gross sales for the period. This is the item that will appear on the reports. The account is not debited, as a usual thing, except through the closing entries, though in some smaller businesses the sales deductions may not be kept in separate accounts but entered directly to the debit of sales at the time when they occur. This would make the credit balance of the sales account show the amount of net sales. This method is not usually a desirable one in a larger business, since in most cases there would be required a more detailed analysis of these deductions than could be readily obtained from the sales account.

The sales account, like other revenue accounts, is closed into profit and loss at the close of each fiscal period, and shows no balance at the beginning of a new period. The exact procedure to be followed in the process of closing this account may vary somewhat. This matter was discussed in chapter x, and will be further considered in chapter xxviii.

SALES

Debit:	*Credit:*
Only with the closing entries made at the end of the fiscal period, which will probably be as follows: *a*) With any sales deductions to be closed into sales account. *b*) With the balance of purchases account, showing cost of goods sold (provided this method is followed in closing). *c*) With the credit balance of sales account, to be transferred to the profit and loss account (sales might show a debit balance, but such is not normally the case).	With the amount of all invoices of merchandise or finished product sold.

Deductions from sales. As indicated previously, the figure of sales shown in the reports is usually that of gross sales. By gross sales is meant the total of all sales invoices, before any deductions are made for returns, allowances, and the like. This figure is a useful one for reporting purposes, since it affords a basis for comparison between total sales and sales deductions. It does not, however, show the amount of the actual income derived from the sales of the period until these deductions have been made.

The deductions most commonly made from gross sales are those for returns and allowances, and for outward freight prepaid by the seller. The amount of goods returned, as well as allowances or rebates made to customers on sales, quite plainly represent a part of the total of gross sales that will never become realized income, and should therefore be deducted to arrive at the figure of net sales. And where the seller pays the charges on an out-of-town shipment of goods, such charges are usually treated as a deduction from gross sales. Such charges are ordinarily borne by the purchaser, and when the shipper pays the freight he is either adding it to his normal selling

price or else is taking this method of making a special price concession to the purchaser. In either case, it is usually treated as a direct deduction from gross sales, though in the latter case it may be treated as a selling expense, like delivery expense.

Sales Returns and Allowances may be taken as typical of the accounts which represent such items of sales deductions. It is debited and credited as follows:

SALES RETURNS AND ALLOWANCES

Debit:	*Credit:*
With invoice price of goods returned by customers for cash refunds or for credit. With all rebates and allowances made to customers for any reason.	Only for the closing entry which transfers the balance of this account to the debit of sales at the end of the fiscal year.

The debit balance of such an account represents the amount that must be deducted from the gross sales for the period in order to obtain the figure of net sales or of actual income realized from sales.

Where the sales account is subdivided on a departmental or a commodity basis, the accounts with sales deductions would also need to be subdivided on the same basis. Thus each sales account would have a corresponding sales deductions account for each class of such items.

Non-operating income accounts. It has been suggested that there may be a considerable variety of non-operating income accounts, since any possible form of income accruing in a given business which does not fall under the regular operating income of that business is classified as non-operating income. Interest earned, rentals earned, sales of scrap and waste, income from incidental investments, and cash discounts taken on purchases, may all fall under this head.

It is not worth while to discuss every conceivable form of non-operating income, or even to name them, but two items of frequent occurrence in the average business may be taken as typical of the entire class. These are: (1) interest on notes receivable and (2) cash discount on purchases.

Interest on notes receivable. Sometimes notes are received from customers and others which are made payable with interest at a stated rate. In such a case, if the note is held for any part of the time it has

to run, some interest will accrue to the business holding it. Such accrual represents an earning of that business for the period during which it occurs, but an earning of a purely financial nature, which is outside the primary income-earning operations of the business, like interest earned on outside investments. It is therefore classed as non-operating, or "other" income. The debits and credits to be made to the account with interest on notes receivable may be indicated as follows:

INTEREST ON NOTES RECEIVABLE

Debit:	*Credit:*
When the books are closed at the end of a fiscal period, with the amount of the credit balance transferred to profit and loss account.	With the amounts of all interest payments received on such notes. At the end of each fiscal period with the amount of all such interest accrued but not yet due.

The balance of this account is normally on the credit side, and should represent the amount of such interest earned by the business during the current period. The method by which this account is to be adjusted and closed will be explained in a later chapter.

Cash discount on purchases. The student is already familiar with the nature of cash discount on purchases. This is a certain percentage, frequently 2 per cent, but sometimes more or less, which the purchaser is allowed to deduct from the face of the invoice if he pays it within a time limit set. Some accountants argue that, since this represents a reduction of the price actually paid for the goods, it should be treated not as other income but as a deduction from purchases. The weight of opinion among writers on the subject is, however, that this item should be included under other income. The reason assigned for this is that it is not really a reduction in the purchase price, which is the same whether the purchaser exercises his option of taking the discount or not. It represents rather a saving due to proper financial management, and to the ability to secure credit at the bank when this is needed to be able to take discounts. Also, since the interest incurred on funds borrowed from the bank for the purpose of enabling the concern to take its discounts is treated as a deduction from total income, as will be explained later, it would be rather misleading to show the total of cash discounts as a deduction from the purchase price of the goods. It is really income

arising out of the financial operations of the business, like interest earned on notes and investments.

The debits and credits to be made to this account may be indicated as follows:

CASH DISCOUNT ON PURCHASE

Debit:	*Credit:*
When the account is closed at the end of the fiscal period, with the amount of the credit balance transferred to profit and loss.	With all discounts taken for payment of purchase invoices within the time limit set.

The credit balance shown by this account at the end of a period represents the amount of cash discounts taken on purchases during the fiscal period. It appears as an item on the statement of profit and loss under the head of "Other Income."

QUESTIONS FOR CLASS DISCUSSION

1. What purpose, if any, is served by dividing income accounts into two main groups, operating and non-operating? Define the basis of distinction.
2. Should you prefer the terms "primary" and "secondary" to "operating" and "non-operating" as applied to the classification of income? What reasons have you for your answer?
3. The X Music Company sells pianos, phonographs and records, band instruments, and sheet music. The company has its main office in Chicago, where its principal selling establishment is located. It has branches in St. Louis, Kansas City, and Omaha. Each of its stores sells both to dealers and direct to consumers. What basis or bases should you suggest for the classification of this company's sales account? What purposes would be served by the classification suggested by you?
4. Should you advise that the X Company carry separate accounts to show sales deductions? Why, or why not? If you advise keeping such accounts, how should they be classified?
5. What possible sources can you suggest from which the X Company might derive non-operating income? Explain clearly in each case why you classify the particular type of income as non-operating. What accounts would be required to record such income?
6. Which do you consider the correct view: That cash discounts taken on purchases are a source of income, or that all such discounts which are not taken represent a loss? Will either of these views differ from the other with respect to the accounts needed to carry it out? Explain.

7. Can you justify the current accounting practice of showing income resulting from the financial management of the business as non-operating income? Discuss.
8. Give the journalization of the following transactions, and justify your analysis in each case: (*a*) the prepayment of freight on a shipment outward, the amount of such charge being added to the amount of the invoice; (*b*) the prepayment of freight outward when the price was quoted f.o.b. the customer's station.
9. The practice of giving discounts for prompt payment of invoices is one which arose shortly after the Civil War. What is the justification for the practice? How do you account for its survival?

REFERENCES FOR FURTHER STUDY

WILDMAN, J. R., *Principles of Accounting*, chaps. xxxiii and xxxviii.
HATFIELD, H. R., *Modern Accounting*, chaps. xi and xii.
KESTER, ROY B., *Accounting Theory and Practice*, Vol. II, chap. xxii.

CHAPTER XXVI

THE CONSTRUCTION AND INTERPRETATION OF ACCOUNTS—EXPENSE ACCOUNTS

Kinds of expense accounts. Like income accounts, expense accounts may be divided into two main groups: operating and non-operating. The operating expenses may be classified in any way that seems desirable in the particular business organization, but in any case they may be divided into two groups. The first of these consists of those items which show the cost of the goods sold, and the second consists of the remainder of the operating expenses necessary to carry on the business, provide for the purchase and sale of goods, for their delivery, and for all other necessary phases of the primary operations of the business. This classification of expense accounts may be indicated as follows:

- I. Operating expense accounts
  - 1. Accounts with cost of goods sold
    - *a*) Purchases account
    - *b*) Other cost of goods sold accounts
  - 2. Other operating expense accounts (classified according to the reporting requirements of the individual business)
- II. Non-operating expense accounts, or "other deductions from income" accounts

The classes of accounts shown by this outline will be considered in the order in which they there appear.

Operating expense accounts. It was pointed out in the preceding chapter that there may be a considerable variation in the operating income accounts of different businesses. The operating expenses may vary even more widely, as regards the individual items with which such accounts will be kept. But for all that, it is not particularly difficult to distinguish between operating expenses and non-operating expenses in any given business, once the nature and purpose of the business is clearly understood. The operating expenses in general are those expenses that are incurred necessarily and directly

in carrying on those operations which lead to the earning of the primary or operating income of the business.

Cost-of-goods-sold accounts. The primary income of any business comes through the sale of something, whether a commodity or a service. It follows that a prime essential for the securing of this income is to have something to sell. In this connection, businesses selling services will for the present be omitted from the discussion and consideration given only to those selling commodities of one kind or another. A business selling goods of any kind must secure the goods either by purchasing them or by producing them. In either case, certain accounts will be needed to show the cost of the goods sold. It does not seem desirable at this point to enter into a discussion of the accounts necessary for this purpose in a manufacturing business, since a satisfactory explanation of the purpose and use of these accounts would require more space than can well be devoted to it in this text. The present discussion of accounts with the cost of goods sold will therefore be confined to those used in mercantile businesses.

Purchases accounts. The most important account in use for this purpose in a mercantile business is the one with purchases. By this is meant the purchases of merchandise for resale. This account is used to show the amount of the merchandise purchased by the business during the current fiscal period, at the invoice price. The reader is already quite familiar with the nature of the transactions affecting this account, and with the routine of handling such transactions and entering them on the books of original entry. He is also aware of the fact that to be of the greatest use for reporting purposes, the purchases account should show only one thing, namely, the total purchases for the period at the invoiced price. This means that the entries which will be made to this account during the accounting period are as follows:

PURCHASES

Debit:	*Credit:*
With the invoiced price of all merchandise purchased.	

In closing the accounts at the end of the fiscal period, however, various methods of procedure may be followed. A desirable method

that has been explained in this text is to close all the accounts affecting the cost of goods sold into purchases account, so that the debit balance remaining to be transferred from purchases when that account is finally closed represents the cost of goods sold. According to that method, also, that balance is transferred to the sales account. Taking into consideration the closing entries, made according to the method indicated, the debits and credits to the purchases account are as follows:

PURCHASES

Debit:	*Credit:*
With the invoiced price of all merchandise purchased during the period. By an adjusting entry at the close of the period, with the amount of the merchandise inventory at the beginning of the period. By the closing entries, with the debit balances of any other accounts with cost of goods sold, transferred to purchases account.	By an adjusting entry at the close of the period, with the amount of the merchandise inventory at the close of the period. By the closing entries, with the credit balances of any accounts with purchases deductions, transferred to purchases account. By a closing entry, with the debit balance of purchases account, transferred to sales, or to some other account used in summarizing the revenue accounts.

From the foregoing discussion, it appears that the balance of the purchases account as it appears on the trial balance taken at the end of the accounting period and on the accounting reports is a debit balance, and shows the total gross purchases. In closing the books, it may be used as a summary account and made to show the cost of goods sold, if so desired. There will be no balance at all in the purchases account at the beginning of a new period.

If the mercantile business in question is organized by departments, and the sales accounts subdivided by departments, in order to make possible the reporting of operating income by departments, the purchases account will need to be subdivided on the same basis, so that gross profits may be shown by departments. But whatever classification is made of purchases, the nature of each purchases account is the same as that of the general purchases account, and involves the same debits and credits.

Accounts with purchases deductions. As in the case of sales, so in ascertaining the net amount of the cost of goods purchased during a period, there are certain deductions to be made. In some smaller

businesses these items are credited directly to the purchases account, but where such deductions amount to any considerable figure, it is considered worth while to have them shown as separate items on the statement of profit and loss. Usually only one such account is kept in connection with purchases, and that is the account with purchase returns and allowances. The debits and credits to this account are as follows:

PURCHASE RETURNS AND ALLOWANCES

Debit:	*Credit:*
For the closing entry, with the credit balance of this account transferred to the purchases account.	With the invoiced price of all goods returned to creditors with their permission. With credit allowed the business by creditors for freight paid on goods returned. With all allowances or rebates allowed the business by creditors for any reason whatever.

The balance of this account at the end of an accounting period is a credit balance, and shows the total credit received by the business for goods returned, and for rebates and allowances of all sorts, this total representing a deduction to be made from the amount of gross purchases in order to ascertain the net cost of goods purchased during the period. If any subdivision is made of accounts with purchases, it will be necessary to have a subdivision of the purchases returns and allowances account on the same basis, in order to show in the reports the amount of the net purchases for each class into which purchases are divided.

Other cost-of-goods-sold accounts. There are certain items to be included in the cost of goods sold, in addition to the purchase price of the goods. Thus the total "laid-down" cost of the goods sold includes not only the purchase price of such goods but also all freight, express, parcels post, and cartage charges incurred in getting them to the place where they are to be sold, as well as any duties or other charges that may have been incurred. A large importing concern might find it desirable to maintain several accounts to show the charges of this nature in more or less detail. Ordinarily, however, not more than one or two such accounts will be maintained. Often there is only one such account, termed variously "In-Freight," "Freight

and Cartage Inward," and "Freight, Express, and Cartage Inward." The nature of all the accounts representing additional charges to cost of goods sold should by this time be fairly clear. The account with freight, express, and cartage inward may be considered typical of all such accounts, and the nature of the debits and credits to this account is shown by the following:

FREIGHT, EXPRESS, AND CARTAGE INWARD

Debit: With all expenses incurred for freight, express, or hauling on merchandise purchased.	*Credit:* By a closing entry at the end of the fiscal period, to transfer the debit balance of this account to purchases.

The balance of this account which will appear on the reports is a debit balance, and will be added to the amount of purchases for the period in that part of the profit and loss statement which shows the cost of goods sold. Since this represents an addition to the purchases account, it should be subdivided or classified on the same basis as the purchases account for purposes of reporting. Thus if a business has four departments, and a separate sales account and purchases account is maintained for each department, a separate account with freight, express, and cartage inward should also be maintained for each department, so that cost of goods sold and gross profit on sales may be reported by departments.

Other operating expense accounts. In addition to the accounts which show the cost of the goods sold, there are a number of accounts showing the amount of various other operating expenses incurred in conducting the business. The number of such operating accounts, and the classification that will be made of them, will be determined by the reporting requirements of the business, which will in turn be determined by the size of the business, the nature of its operations, and the manner in which it is organized. Thus the accounts of a particular business may be such as to show the expense of each kind of service rendered, such as buying, selling, delivering, collecting the accounts due, etc., and to show the cost of each of these services for each department of the business. A discussion of the classification of accounts is reserved for chapter xxix. But in a business of any considerable size there will be a number of such accounts kept,

classified in such a manner as seems most useful for the reporting requirements of that particular business.

The nature and construction of these operating expense accounts differ only with the nature of the expense and the manner in which it is incurred and brought into the books. For the most part, the debits and credits to the operating expense accounts are all made in the same manner. Wages of Sales Clerks may be taken as a type of the ordinary operating expense account. The debits and credits to be made to this account would be as follows:

WAGES OF SALES CLERKS

Debit:	*Credit:*
With the amount of all wages paid to sales clerks during the fiscal period. At the end of the period with any wages of sales clerks which have accrued but are not yet payable.	By a closing entry, with the debit balance of the account, representing the amount of this class of expense for the period, which is transferred to profit and loss. By a "post-closing" entry, to transfer back to this account the amount of wages accrued but not yet payable at the end of the period (for explanation, see chapter xxvii).

The debit balance of this account at the end of the period represents the amount of such expense which is chargeable against the operating income of the period. Where a post-closing entry causes this account to show a credit balance at the beginning of the new period, this balance represents the amount of such expense which was charged against the operations of the period just ended, but which has not been paid. This credit balance will be wiped out by the debit to this account resulting from the first payment of such wages. The resulting debit balance will be the part of that payment which is chargeable to the operations of the new period.

In a business having several selling departments, this account may be subdivided to show the amount of such expenses chargeable to each of these departments.

Accounts with estimated operating expenses. Another type of operating expense which deserves some attention here is that kind of expense which is not reckoned by the amount actually paid out or definitely accrued, but by the amount which is estimated according to some predetermined scheme, to be properly chargeable as an

expense of the current period. Examples of this type of expense are: (1) loss from bad debts, and (2) depreciation on store equipment. In the case of each of these expenses, the amount is determined by an estimate, made at the end of the period, and an entry is then made, debiting the expense account and crediting a valuation reserve account. The account with depreciation on store equipment may be taken as typical of such accounts. The amount with which this account will be debited at the end of a fiscal period is determined by the original cost of the equipment then in use, and its estimated length of useful life. The debits and credits to this account are as follows:

DEPRECIATION OF STORE EQUIPMENT

Debit: At the end of the fiscal period with the amount of that portion of the value of store equipment to be charged to expense for the current period as determined by the depreciation schedule.	*Credit:* By a closing entry, with the debit balance of the account, to be transferred to profit and loss.

The debit balance of this account, which appears on the statement of profit and loss for the period, represents the amount that is estimated as chargeable against the period's operations for the loss in value resulting from the use of the store equipment.

Accounts with other deductions from income. Just as there are certain items of income accruing to a business which cannot be classed as a part of the operating income of that business, so there are certain items of expense incurred in the ordinary business which cannot be properly classified as operating expense. That is to say, it cannot be definitely connected with any of the primary operating functions of the business, and must therefore be omitted from consideration on the statement of profit and loss until after the net operating income has been ascertained by a comparison of total operating income and total operating expense. Just what such items will be in a particular business will depend largely on the nature of the operations of that business. Two such items that occur in most mercantile concerns are: (1) interest on notes payable, and (2) cash discount on sales.

Interest on notes payable. It is quite usual for the average business to give its notes to the bank in order to secure credit there which will serve as a means of discharging the obligations which the business has incurred to its creditors. In many cases, also, notes are issued to trade creditors. Notes to trade creditors sometimes bear interest and sometimes do not. Notes given to the bank may bear interest also. If not, the bank deducts the interest from the face of the note and credits the borrowing concern with the difference. Interest on notes payable, therefore, is an item of frequent occurrence in the ordinary business. This item represents an expense incurred in financing the business, and should be kept entirely separate from the expenses incurred in carrying on the operations for which the business is organized. It is therefore to be classed as "other deductions from income." The debits and credits to this account are as follows:

INTEREST ON NOTES PAYABLE

Debit:	*Credit:*
With the amount of all interest payments made on such notes. With the amount of discount deducted from the face of notes payable by the bank. At the end of each fiscal period with the amount of all such interest accrued but not yet payable.	By a closing entry, with the amount of the debit balance of this account transferred to profit and loss account. By a post-closing entry with the amount of interest accrued for the current period, but not yet payable (for explanation, see chapter xxvii).

The debit balance of this account which appears on the statement of profit and loss represents the total amount of such interest accruing during the current period. The credit balance which may appear in the account as the result of a post-closing entry shows the amount of such interest accrued and charged against the income of the period just past, but not yet payable. This matter will be explained at length in the following chapter.

Cash discount on sales. Cash discount on sales is a discount allowed to customers for the payment within a certain limited time of invoices sold them. It is sometimes argued that this item should be treated as a direct deduction from sales, like sales returns and allowances, since it represents a reduction of the price of goods. The weight of opinion among accountants, however, seems to be in favor of treating it as other deductions from income. The reason for this is that this item represents a cost of a financial nature. The price of the

goods is the same, whether the customer exercises his option with regard to the discount or not. The discount allowed is partly in the nature of insurance against bad debts, and partly in the nature of interest paid for the use of the money between the discount date and the time when the payment would otherwise be due. For this reason, this item is to be considered rather as a financial expense than as a deduction from sales. It is therefore usually classified as non-operating.

The debits and credits to the account with cash discount on sales are as follows:

CASH DISCOUNT ON SALES

Debit:	*Credit:*
With all discounts taken by customers for the payment of sales invoices within the time allowed.	By a closing entry, with the amount of the debit balance of the account transferred to profit and loss account.

The debit balance shown by this account at the end of a fiscal period represents the amount of cash discounts taken by customers during the current period. This balance appears on the statement of profit and loss under the head of "other deductions from income."

QUESTIONS FOR CLASS DISCUSSION

1. How do you justify the discussion of purchases account under the head of operating expenses?
2. Does the balance in purchases account at the end of a period, and before any adjustments have been made, represent an expense? If not, what does it represent?
3. What basis of analysis should you suggest for the purchase accounts of the X Music Company (see question 3 at the end of chapter xxv)? Give a complete classification of the accounts which should be used in this business to show the cost of sales. Justify your classification.
4. Besides its four selling departments, divided according to commodities, the X Music Company maintains a delivery service, a credit and collection department, and a service department for the purpose of giving service to customers on goods covered by guarantees. The company also has a central advertising department, which handles the advertising for all its branches, and gives advertising aid to dealers. What does this suggest to you with regard to the classification of operating expense which should be maintained by this company?

5. In your classification of expense accounts for the X Company, what disposal should you make of depreciation on buildings? loss from bad debts?
6. List all of the non-operating expenses that you can think of which might occur in the X Company's business. Explain why each of these expenses is considered non-operating in its nature.
7. Does the current practice of including cash discount on sales under non-operating expenses seem to you to be based on logical reasons? Discuss.

REFERENCES FOR FURTHER STUDY

WILDMAN, J. R., *Principles of Accounting*, chaps. xxxiv, xxxvi–xliv.
GREENDLINGER, LEO, *Financial and Business Statements*, chap. iv.
DICKINSON, A. L., *Accounting Practice and Procedure*, chap. iii.

CHAPTER XXVII

ACCRUALS AND DEFERRED ITEMS

Special entries necessary at close of period. At the end of any fiscal period, there are always many facts concerning the financial status of the business which have not yet been recorded in the ledger accounts, but which must, nevertheless, be considered if the financial reports are to be complete and correct in their showing. Thus there may be certain items which really exist as assets of the business, but which have not been entered on the books, since no clearly defined transaction has arisen to cause such entry to be made. In the same way liabilities may have arisen which have not yet any sort of voucher, and which have therefore not been recorded as liabilities. Income may have been earned or expense incurred without giving rise to an entry; or there may be items standing on the books as expense which are not properly chargeable against the earnings of the current fiscal period. Sometimes, also, credits are entered on the books for income which are not properly to be considered as an earning of the current fiscal period.

A correct statement of the proprietorship and of net income for the period requires that such facts, so far as they can be ascertained, be recognized and recorded. The items of this kind which will be considered in the present chapter may be classified as follows: (1) accrued income; (2) accrued expense; (3) deferred charges to expense; (4) deferred credits to income.

Accrued income. In order to state correctly the income of a given fiscal period, all the income which has been earned by the business during the period must be included in the statement. Income may be earned during one period which does not become due and payable until some time which falls in a later fiscal period. Such items are not ordinarily entered on the books before they become payable, since no voucher arises as the basis of such entry, and since up to that time the amount is as a rule continually changing. At the end of an accounting period, however, they must be recognized and

correctly recorded if the income is to be properly apportioned between periods.

An illustration of such income is to be found in the case of interest on notes receivable. Thus if the business accepts a customer's sixty-day note for $1,000 with interest at 6 per cent, dated December 1, and continues to hold this note until December 31, the day of closing the books, it is apparent that one month's interest, or $5, has been earned during the period just ended. On December 31, then, the claim of the business for this amount should be shown on the balance sheet as an asset, and the amount of the earning should appear on the statement of profit and loss for the current period.

If this item of accrued interest is to appear in the financial reports, it should also appear in the accounts, since the balance sheet and statement of profit and loss are supposed to reflect the financial facts about the business as shown by the accounts. To bring this item into the accounts there must be a debit made to some asset account, which may be called "Accrued Interest Receivable," and a credit to the income account, "Interest on Notes Receivable." Assume that this income account has been credited throughout the year for various items, amounting altogether to $31, and that there is no other item of accrued interest receivable. Under these circumstances the two accounts affected by the entry might appear as follows:

INTEREST ACCRUED RECEIVABLE

1919 Dec. 31	. . . . . .	5	00				

INTEREST ON NOTES RECEIVABLE

				1919 Feb. 15	. . . . .	4	40
				May 25	. . . . .	10	80
				July 7	. . . . .	6	75
				Sept. 20	. . . . .	3	25
				Nov. 18	. . . . .	5	80
				Dec. 31	Accrued	5	00

When the closing entries, as of December 31, are made, the income account will be closed to profit and loss, and will appear, after posting, as follows:

INTEREST ON NOTES RECEIVABLE

1919				1919			
Dec. 31	To Profit and Loss	36	00	Feb. 15	. . . . .	4	40
				May 25	. . . . .	10	80
				July 7	. . . . .	6	75
				Sept. 20	. . . . .	3	25
				Nov. 18	. . . . .	5	80
				Dec. 31	. . . . .	5	00
		36	00			36	00

On January 30 the note will mature and be paid, with the $10 interest. The amount of interest received will be credited to interest on notes receivable account, but as a matter of fact only one-half of that amount represents an earning of the period in which the entry for its receipt is made. The other half of the interest was earned and credited to income in the preceding period. This fact may be indicated and a correct showing of income provided for in the ledger by closing the accrued income account into the income account after the ledger has been closed at the end of a period. After this entry has been made and posted, the two accounts affected will appear as follows:

INTEREST ACCRUED RECEIVABLE

1919				1920			
Dec. 31	. . . . .	5	00	Jan. 1	. . . . .	5	00

INTEREST ON NOTES RECEIVABLE

1919				1919			
Dec. 31	To Profit and Loss	36	00	Feb. 15	. . . . .	4	40
				May 25	. . . . .	10	80
				July 7	. . . . .	6	75
				Sept. 20	. . . . .	3	25
				Nov. 18	. . . . .	5	80
				Dec. 31	Accrued	5	00
		36	00			36	00
1920							
Jan. 1	. . . . .	5	00				

On January 30, when the $10 interest is received and credited to interest on notes receivable, the $5 debit already made to that account

by transferring the balance back from the accrued asset account will offset the credit by that amount, making the net credit only $5, which is the amount actually earned during 1920.

The foregoing discussion of the treatment of accrued interest receivable applies to other items of accrued income. If there are a number of such items at the end of a period, it is not always necessary to carry a separate account for each kind of income accrued. It is usually sufficient to carry a single account with accrued income. Whether one or several items of this nature are shown in the ledger accounts will of course depend on the classification which is desired in the balance sheet. Such items are shown on the balance sheet among the current assets.

Accrued expenses. If it is necessary to the correctness of the financial reports that all items of current income should be included, it is equally necessary that all items of current expense should be shown. At the end of a fiscal period there are almost always some services which have been received by the business but for which payment will not be due until some time in the following period. In the normal course of business procedure no entry is made on the books of either the expense or the liability until the latter becomes payable, and some sort of voucher arises to serve as a basis of such entry. The most common example of such an accrued expense item is to be found in the pay-roll. Assuming that wages are payable on Saturday, and that the fiscal period ends on Wednesday, it is evident that the business has incurred as an item of expense the cost of three days' wages, and also that they have a liability for this amount. These "accrued wages" should appear on the balance sheet as a liability, and also on the statement of profit and loss as an expense of the current period.

Since such items of accrued expense are to be shown on the balance sheet and the statement of profit and loss, they must also be shown by the accounts at the time these reports are made up. This necessitates an entry debiting the appropriate expense account and crediting the account which represents the accrued liability. The account with salaries of sales force may be used for illustration. It may be assumed that on December 31 this account shows a balance of $5,630, which represents the total charges to the account for the year 1919. The amount accrued for the first three days of the week ending January 3, 1920, is $55. After the entry recording the accrual has

been made and posted, the two accounts involved will appear as follows:

SALARIES OF SALES FORCE

1919 Dec. 31	Balance	5,630	00				
31	Accrued	55	00				

ACCRUED WAGES

				1919 Dec. 31	Sales force	55	00

When the closing entries for the period have been made and posted, this expense account will have been closed to profit and loss, and will show the following:

SALARIES OF SALES FORCE

1919 Dec. 31	Balance	5,630	00	1919 Dec. 31	To Profit and Loss	5,685	00
31	Accrued	55	00				
		5,685	00			5,685	00

When the week's wages are paid on January 3, $110 will be paid to the sales force. This will be debited to the account with salaries of sales force. But if no other adjustment is made of the account balances, this account will be overstated by $55, since that portion of the week's pay-roll has already been charged off against last period's earnings. This would also fail to show that the accrued liability is now canceled. This difficulty is avoided by an entry made immediately after closing the ledger for 1919, by which accrued wages is debited for the amount of its balance, and salaries of sales force credited. Assuming that such an entry is made, and that an entry is made on January 3 to record the payment of the week's wages, the expense account and accrued liability account would then appear as on page 310.

It is apparent from the following illustration that after the wages have been paid on January 3, the account with salaries of sales force will show the correct balance, since the $110 debit is offset by the $55 credit, representing the amount which has already been charged to

profit and loss and is therefore not to be included in the expense of the current period.

The foregoing discussion, with the illustration, applies to the treatment of accrued expenses in general. It is not always necessary to set up a separate liability account for each kind of expense which is accrued. A single account with accrued expense will usually serve satisfactorily, unless for some reason further analysis of such liabilities is to be shown on the balance sheet. The place of such an account on the balance sheet is among the current liabilities.

SALARIES OF SALES FORCE

1919 Dec. 31	Balance	5,630	00	1919 Dec. 31	To Profit and Loss	5,685	00
31	Accrued	55	00				
		5,685	00			5,685	00
1920 Jan. 3	Cash	110	00	1920 Jan. 1	. . . .	55	00

ACCRUED WAGES

1920 Jan. 1	. . . . .	55	00	1919 Dec. 31	. . . . .	55	00

The entries affecting accrued income and expenses are part of the entire group of adjusting entries made at the end of a fiscal period. In illustrating these two kinds of adjusting entries the accounts as affected by the entries have been shown, rather than the entries themselves. The adjusting entries as a group will be considered in chapter xxviii.

Deferred charges to expense. It very often happens that a business pays in advance for the right to receive a certain service, or purchases certain kinds of supplies in sufficient quantity to last for some time. At the time when such services are received by the business the amount so used up becomes an expense. Also, the amount of any kind of supplies used up in a given period is an expense of that period. But the amount of such services or supplies which are paid for and still unused at the end of a fiscal period is said to be a *deferred charge to expense*, or a *prepaid expense.* Some examples of such deferred charges are: prepaid interest, prepaid insurance, office supplies

remaining on hand at the end of a period, and unused service or supplies of almost any sort, such as coal, wrapping paper and twine, supplies for window dressing, and the like. For purposes of illustration unexpired insurance will be used as typical of services unused, and office supplies as typical of supplies on hand.

The nature of the service of insurance is well known. Business men, in order to minimize the risks attendant on conducting a business, usually contract with one or more insurance companies for the assumption of certain of these risks by the insurance company. Such a contract provides that in return for a certain consideration, known as the *insurance premium*, the company agrees to indemnify the owner for the loss of such property as is covered by the contract, such indemnity not to exceed a sum set in the contract. Such contracts have assumed a fairly standardized form, and are known as *insurance policies*. Such a policy is drawn to cover a definite period of time, usually a year, and the premium is always payable in advance.

INSURANCE POLICY RECORD
(Left-hand Page)

Date of Policy	Number	Name of Company	Property Insured	Amount	Expires	Total	Premium

INSURANCE POLICY RECORD
(Right-hand Page)

Monthly Expirations												Amount Carried Forward
Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	

It is quite usual for a business firm to have at one time several such policies, entered into with different companies, at different times, and covering risks on different property. Where this is true, it is desirable to have some record of the different policies.

Such a record should show when each policy expires, and also the amount of the premium which is to be charged to expense during a given fiscal period, and the amount which represents a deferred charge at the end of such period. A form of such an *insurance policy record*, which furnishes the information desirable with regard to the policies held by the business, is shown on page 311.

Whenever an insurance policy is taken out by a business using such a record as the above, it is recorded, entering in the monthly columns the amount of the premium which will expire during the current year, and in the column headed "Amount Carried Forward" the amount that will be unused at the end of the current fiscal year. The entry for the payment of the premium is made in the cash book, debiting prepaid insurance account, or insurance unexpired.

The purpose of the prepaid insurance account is to show the amount of insurance premiums paid which have not yet expired. It is debited with the amount of all premiums paid, and credited at the end of each month with the total of the premiums shown by the insurance policy record to have expired within that month, the corresponding debit being to the expense account affected by such expiration. The debits and credits to the prepaid insurance account may be summarized as follows:

PREPAID INSURANCE

Debit:	*Credit:*
With amounts of all insurance premiums paid.	At the end of each month with all amounts of insurance premiums expired, as shown by the insurance policy record, or otherwise determined. With insurance premiums refunded on canceled policies.

The balance of this account after the proper credits have been made to it shows the amount of the unexpired premiums and appears on the balance sheet as a prepaid expense, or deferred charge to expense.

At the beginning of a new fiscal year the insurance policy record will be ruled up and a new entry made for the policies still in force, carrying down the amount of premium unexpired on each, and distributing the expirations for the new year by months, as before.

Office supplies may be taken as an example of supplies on hand at the end of a fiscal period. This item includes such things as station-

ery, stamps, pencils, pens, clips, etc. The account with office supplies is intended to show the cost of all such supplies purchased, the amount used up within the period, and the amount remaining unused at the end of the period. It will be debited and credited as follows:

OFFICE SUPPLIES

Debit:	*Credit:*
With the cost of all office supplies purchased during the accounting period.	With the cost of all office supplies used or in any way disposed of during the period.

When "Office Supplies" is credited, the corresponding debit is to the expense account chargeable with the supplies used. This is usually "Office Expense" or "Administrative Expense." Except in very large businesses, it is not usually considered worth while to keep a continuous record of the amount of office supplies on hand and the amount used. Where this is not done, the cost of the supplies used is obtained by taking an inventory of such supplies at the end of each period. The amount of the inventory represents the amount of the debit balance that should appear in the office supplies account. The difference between this amount and the balance actually shown in that account is therefore taken to represent the amount used during the period, and this amount is debited to some expense account and credited to the office supplies account. The balance remaining is consequently the amount of the inventory, and this amount is shown on the balance sheet as a deferred charge to expense.

Deferred credits to income. Income is sometimes received during one period which has not been earned by the business during that period but will be earned in the following fiscal period. Such items of income are known as *deferred credits to income.* Examples of such deferred credits are to be found in the case of the insurance company which receives payments for insurance premiums which do not expire during the current period; in the case of a publishing concern which receives subscriptions to its publication, paid in advance, for a period of time which runs past the end of the current fiscal period; and in the case of a commercial bank which discounts the note of a customer, deducting in advance the amount of the interest, which may be for a period which runs beyond the end of the year.

The case of the commercial bank may be used for an illustration. When the bank discounts a customer's note, an entry would be made debiting Loans and Discounts for the face of the note, crediting the customer, or possibly Cash, for the proceeds of the note, and crediting Discount Earned for the amount of the interest or discount deducted. At the end of a fiscal period this account will show a credit balance, including not only all the discount earned during the period but also a considerable amount that will not be earned until some time in the following period. At the end of a fiscal period, if the proprietorship in the bank and its income for the period are to be shown correctly, it will be necessary to show as income only that portion of the discounts which have been earned within the period, and to show the unearned discounts on the balance sheet as a deferred credit to income.

NOTES DISCOUNTED RECORD

Date Dis-counted	Maker of Note or Acceptor of Draft	Indorser of Note or Drawer of Draft	Date Dis-counted	Date of Maturity	Discount Rate	Amount of Note	When Paid

NOTES DISCOUNTED RECORD

Expirations of Interest												Amount Carried Forward
Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	

Certain classes of banks are now required by the federal examiners to show the amount of discounts unearned as an item on the balance sheet. The accounting departments of many of them objected to this because of the tremendous amount of work involved in classifying the notes and dividing the discount deducted as between earned and unearned. The work required for this may be minimized by the use of a record along the lines of the insurance policy record illustrated

above. Such a form would need to provide for certain essential information about each note, draft, or trade acceptance discounted, and also to show an analysis by months of the discount earned. The information needed would probably be about as given on page 314.

Such a record as this, modified in any way necessary to fit the needs of the bank using it, would furnish the information necessary to divide the Discount Earned during a given fiscal period from that unearned. An entry would then be made at the end of the period debiting Discounts Earned and crediting Discounts Unearned for the amount of discounts shown by this record to be unexpired at the end of the period. The two accounts, used in this manner, would be debited and credited as follows:

DISCOUNT EARNED

Debit:	*Credit:*
At the end of the period with the amount of discount unearned.	With the amount of discount deducted when the note or draft is discounted. At the beginning of a new period with the balance of discount unearned account.

DISCOUNT UNEARNED

Debit:	*Credit:*
At the beginning of a new period with the amount of the balance, to transfer back to discount earned account.	At the end of a period with the amount of discount unexpired.

The foregoing represents the method by which most of the banks seem to have handled these two accounts. A more logical method, which would avoid the necessity of closing discounts unearned back into discounts earned account at the beginning of each period, would be to debit and credit these accounts as follows:

DISCOUNT UNEARNED

Debit:	*Credit:*
At the end of each month with all amounts of discounts expired, as shown by the notes discounted record.	With the amounts of all discounts received on notes and drafts discounted.

DISCOUNT EARNED

Debit:	Credit:
With closing entry (to profit and loss).	At the end of the month with all amounts of discounts expired, as shown by the notes discounted record.

Other types of payments received by a business in advance of the rendering of the service by the business may be handled in the same manner. Where any considerable number of such payments are received, it is highly desirable that some sort of supplementary record should be maintained to show at any time what portion of this income has been earned and what portion is still unearned. The amount of all such receipts should be credited to an unearned income account and transferred from this account to an appropriate income account, as the supplementary record shows them to have become earned income.

QUESTIONS FOR CLASS DISCUSSION

1. The Fashion Publishing Company issues a magazine, *Modes*. Subscriptions are all paid in advance. They are made and renewed at various times throughout the year, being paid for periods of one, two, or three years. Outline the method which you should recommend for accounting with this source of income. Should you employ any special types of records?
   Give the journal entries which would be necessary to adjust this matter at the end of the fiscal year.
2. The Fashion Publishing Company issues with each copy of its magazine a coupon good for a pattern. These patterns are available at various stores throughout the United States. What is the nature of the accounting problems to which this practice would give rise?
3. On December 2 the firm of Taylor and Wilson discounts its sixty-day note for $1,000.00 at the bank, the rate being 6 per cent. On December 15 the firm gives a trade creditor its thirty-day note for $1,500.00, with interest at 6 per cent. The fiscal period ends December 31.
   a) What journal entries should be made when each of these notes was issued?
   b) What journal entries affecting the interest on notes payable account should be made at the end of the fiscal period? What term or terms may be used to characterize these entries?
   c) What entries should be made when each of these notes matures?

4. Explain the purpose of the "post-closing" entries, in the case of (*a*) accrued expense; (*b*) accrued income. What difference would the omission of such entries make in the later accounting? Illustrate by means of skeleton accounts.
5. Taylor and Wilson have in their ledger an account with "Office Supplies," which is debited with all purchases of such supplies. Explain two methods by which this account may be adjusted at the end of a fiscal period. Illustrate by means of skeleton ledger accounts. Would either of these methods necessitate the use of "post-closing" entries? Have you a preference as between the two methods? Discuss.
6. Explain the significance of the item "Discount Received but Unearned," which appears on the balance sheet of a certain bank. What journal entries are necessary to adjust this account at the close of the fiscal period?
7. The Federal Income Tax law allows an individual the option of reporting his income and expense on either a "cash" basis, or an "accrual" basis. Explain.
8. Under what circumstances should you consider it more desirable to use the cash basis in reporting? The accrual basis?

REFERENCES FOR FURTHER STUDY

Esquerré, Paul-Joseph, *Applied Theory of Accounts*, chaps. xxv and xxvi.

Wildman, J. R., *Principles of Accounting*, chaps. xxvii and xlv.

Kester, Roy B., *Accounting Theory and Practice*, Vol. I, chap. xvi.

CHAPTER XXVIII

ADJUSTING AND CLOSING ENTRIES

Need for such entries. It has been repeatedly pointed out that a business concern reports on its financial condition or on the success of its operations at the end of certain *fiscal periods*, or accounting periods. The length of the period is set by the management, and may be a month, three months, six months, a year, or any time that seems best. The fiscal period was formerly generally set at one year, and usually began and ended with the calendar year. The increased importance attached to the use of the reports as an aid in management has had the effect of shortening the fiscal period in a great many businesses, so that a reporting period of one month is not at all unusual. At the end of the fiscal period, whatever its length, it is the practice to bring the information in the accounts up to date in order to make the accounts state as correctly as possible the operations of the period just ended, and the status of the business as on the last day of that period. This information is set forth in the balance sheet and the statement of profit and loss prepared at that time, and the various revenue accounts are summarized in the ledger to show the net effect of the period's operations on the proprietorship of the business. Making such a summary is known as the process of "closing the ledger." It is explained in full at a later point in this chapter.

In order to make the accounts show complete and correct information at the end of the period, it is necessary to record certain facts which for one reason or another have not been recorded in the regular routine of entering business transactions. For example, recognition must be given to the fact that a certain amount of depreciation on the fixed assets is chargeable against the income of the period, and the value of the assets affected must be adjusted on this basis. The estimated loss on bad debts which is to be charged against the income of the period must be entered, and a revaluation made of current receivables on the basis of this estimate. Recognition must be given in the accounts to items of accrued income, accrued expense, deferred

charges to expense, and deferred credits to income, if such items exist. The adjustment of the accounts to show such facts necessitates the making of certain *adjusting entries* at the close of the period.

The working sheet. Before making the adjusting entries at the end of a period, it is customary to post all the ledger accounts to date and take a trial balance. This trial balance shows the condition of the accounts as affected by the current transactions for the period. The trial balance cannot be used for preparing the financial reports, however, until the necessary adjusting entries have been made. To facilitate the making of these adjustments the accountant frequently makes use of the *working sheet*, by means of which he is able to summarize the information which is to go into the reports. It is a form used for scheduling or tabulating the information in question, and consists of the trial balance and six or more additional columns. The columns needed, and their purpose, may be seen from the following form:

WORKING SHEET

Trial Balance			Adjustments		Profit and Loss		Balance Sheet	
Name of Account	Debits	Credits	Debits	Credits	Debits	Credits	Debits	Credits

The names of the accounts involved appear first at the left-hand side of the page. The first two money columns show the trial balance as taken from the books after they are posted at the end of the fiscal period. The next two columns, headed "Adjustments," show the adjustments which must be made to the various accounts in order to bring them up to date for reporting purposes. The two columns headed "Profit and Loss" show the items which will appear in the statement of profit and loss, classified according to their effect on net income. The two "Balance Sheet" columns show the items which will appear in the balance sheet, the left-hand side showing the assets, and the right-hand side showing liabilities, asset valuation accounts, and proprietorship items.

Illustration of the working sheet. The use of the working sheet may be simply illustrated. Assume that John Haynes is conducting a

retail business, and that the fiscal period is one month. After the posting has been done at the end of the month, a trial balance is taken, which is as follows:

JOHN HAYNES

TRIAL BALANCE,[1] JULY 31, 1920

Cash	$ 5,120.00	
Accounts Receivable	15,990.00	
Notes Receivable	4,000.00	
Merchandise Inventory (June 1)	11,500.00	
Store Equipment	725.00	
Reserve for Depreciation Store Equipment		$ 125.00
Delivery Equipment	1,500.00	
Reserve for Depreciation Delivery Equipment		300.00
Accounts Payable		8,140.00
Notes Payable		9,000.00
Purchases	19,600.00	
Purchases Returns and Allowances		650.00
Freight and Cartage Inward	220.00	
Sales		23,625.00
Sales Returns and Allowances	460.00	
Sales Salaries	1,500.00	
Advertising	220.00	
Delivery Expense	190.00	
Rent	300.00	
Insurance Prepaid (to end of year)	120.00	
Heat and Light	56.00	
Cash Discount on Purchases		245.00
John Haynes, Capital		19,466.00
John Haynes, Personal	50.00	
	$61,551.00	$61,551.00

SUPPLEMENTARY DATA

1. Inventories:
   Merchandise inventory, July 31, $13,000.00
2. Depreciation:
   Store equipment, 12 per cent
   Delivery equipment, 18 per cent
3. Reserve for bad debts:
   One-fifth of 1 per cent on accounts receivable

[1] This trial balance is not to be taken as representing a desirable or representative classification of accounts. The thing to be illustrated here is the method employed in summarizing the accounts at the close of the period.

4. Deferred charges:
   Coal on hand, $17.00
   Gasoline and auto supplies, $30.00
   Insurance has expired to the amount of $20.00
5. Accrued expense:
   Salaries accrued, $90.00
   Interest on notes payable, $18.00
6. Accrued income:
   Interest on notes receivable, $12.00

The adjusting entries. The journal entries which will be necessary to adjust the accounts to give recognition to the additional data listed above are as follows:

July 31

Purchases	$11,500.00	
Merchandise Inventory		$11,500.00
To close the beginning inventory into Purchases account		
31		
Merchandise Inventory	13,000.00	
Purchases		13,000.00
To enter the inventory as at July 31		
31		
Depreciation on Store Equipment . .	7.25	
Reserve for Deprecation Store Equipment . .		7.25
To enter period's depreciation on store equipment		
31		
Delivery Expense	22.50	
Reserve for Depreciation on Delivery equipment		22.50
To enter period's depreciation on delivery equipment		
31		
Loss from Bad Debts	30.00	
Reserve for Bad Debts		30.00
To enter estimated loss from bad debts		
31		
Supplies Inventory[1]	47.00	
Heat and Light		17.00
Delivery Expense		30.00
To enter deferred charge for supplies inventory and adjust expense for the period		

[1] Another method, illustrated in the preceding chapter, would probably be preferable here, but would involve a different arrangement of accounts in the trial balance. This method would be that of charging purchases of supplies to the supply accounts, and at the end of the period crediting the supply accounts and debiting the expense accounts.

	31		
Insurance		$20.00	
Insurance Prepaid			$20.00
To record insurance expired for the period.			
	31		
Sales Salaries		90.00	
Salaries Accrued			90.00
To record accrued sales salaries			
	31		
Interest on Notes Payable . . .		18.00	
Interest Accrued Payable			18.00
To record interest accrued on notes payable			
	31		
Interest Accrued Receivable . . .		12.00	
Interest on Notes Receivable			12.00
To record interest accrued on notes receivable			

The trial balance, the adjustments to be made on the accounts as there shown, and the disposal of the adjusted balances as between the balance sheet and the statement of profit and loss, can all be summarized on the working sheet, on page 323.

The statement of profit and loss. When the working sheet is completed, the accountant has before him a summary of the accounts, corrected to show the true condition of the business at the end of the period. He is then ready to prepare the financial statements from the information furnished by this schedule. The corrected balances of the accounts affecting the statement of profit and loss have been carried into the two columns headed "Profit and Loss," and those affecting the balance sheet are carried into the two columns headed "Balance Sheet." The profit and loss columns and the balance sheet columns are then totaled to make sure that the excess of the credit column under "Profit and Loss" over the debit columns, showing the net profit for the period, is the same in amount as the excess of the debit column under "Balance Sheet" over the credit column under that heading, this excess also representing the increase in proprietorship, or net profit for the period. The statement of profit and loss

JOHN HAYNES

WORKING SHEET—JULY 31, 1920

NAME OF ACCOUNT	TRIAL BALANCE		ADJUSTMENTS		PROFIT AND LOSS		BALANCE SHEET	
	Debits	Credits	Debits	Credits	Debits	Credits	Debits	Credits
Cash	5,120 00						5 120 00	
Accounts receivable	15,990 00						15,990 00	
Notes receivable	4,000 00						4,000 00	
Merchandise inventory	11,500 00		13,000 00	11,500 00			13,000 00	
Store equipment	725 00						725 00	
Reserve for depreciation store equipment		125 00		7 25				132 25
Delivery equipment	1,500 00						1,500 00	
Reserve depreciation on delivery equipment		300 00		22 50				322 50
Accounts payable		8,140 00						8,140 00
Notes payable		9,000 00						9,000 00
Purchases	19,600 00		11,500 00	13,000 00	18,100 00			
Purchases returns and allowances		650 00				650 00		
Freight and cartage in	220 00				220 00			
Sales		23,625 00				23,625 00		
Sales returns and allowances	460 00				460 00			
Sales salaries	1,500 00		90 00		1,590 00			
Advertising	220 00				220 00			
Delivery expense	190 00		22 50	30 00	182 50			
Rent	300 00				300 00			
Insurance prepaid	120 00			20 00			100 00	
Heat and light	56 00			17 00	39 00			
Cash discount on purchases		245 00				245 00		
John Haynes, capital		19,466 00						19,466 00
John Haynes, personal	50 00						50 00	
Depreciation on store equipment			7 25		7 25			
Loss from bad debts			30 00		30 00			
Reserve for bad debts				30 00				30 00
Supplies inventory			47 00				47 00	
Insurance			20 00		20 00			
Salaries accrued				90 00				90 00
Interest on notes payable			18 00		18 00			
Interest accrued, payable				18 00				18 00
Interest accrued, receivable			12 00				12 00	
Interest on notes receivable				12 00		12 00		
	61,551 00	61,551 00	24,746 75	24,746 75	21,186 75	24,532 00	40,544 00	37,198 75
Net profit for period					3,345 25			3,345 25
	61,551 00	61,551 00	24,746 75	24,746 75	24,532 00	24,532 00	40,544 00	40,544 00

may then be prepared from the items appearing in the profit and loss columns, as follows:

JOHN HAYNES

STATEMENT OF PROFIT AND LOSS FOR MONTH ENDING JULY 31, 1920

Gross Sales			$23,625.00
Less Returns and Allowances			460.00
Net Sales			23,165.00
Cost of Goods Sold:			
Gross Purchases		$19.600.00	
Less Returns and Allowances		650.00	
Net Purchases		18,950.00	
Freight and Cartage Inward		220.00	
Inventory, July 1, 1920		11,500.00	
		30.670.00	
Less Inventory, July 31, 1920		13,000.00	
Cost of Goods Sold			17,670.00
Gross Profit on Sales			5,495.00
Operating Expenses:			
Selling Expenses:			
Sales Salaries	$1,590.00		
Advertising	220.00		
Depreciation Store Equipment	7.25		
Total Selling Expense		1,817.25	
Delivery Expense		182.50	
Administrative Expense:			
Rent	300.00		
Insurance	20.00		
Heat and Light	39.00		
Loss from Bad Debts	30.00		
Total Administrative Expense		389.00	
Total Operating Expense			2,388.75
Net Operating Profit			3,106.25

Other Income:			
Interest on Notes Receivable		$ 12.00	
Cash Discount on Purchases		245.00	
Total Other Income			$ 257.00
Gross Income			3,363.25
Deductions from Income:			
Interest on Notes Payable		18.00	
Total Deductions from Income			18.00
Net Income			$ 3,345.25

The balance sheet. From the items appearing in the balance sheet columns, the following balance sheet may be prepared:

JOHN HAYNES

BALANCE SHEET, AS OF JULY 31, 1920

ASSETS

Current Assets:			
Cash		$ 5,120.00	
Notes Receivable		4,000.00	
Accounts Receivable	$15,990.00		
Less Reserve for Bad Debts	30.00	15,960.00	
Merchandise Inventory		13,000.00	
Interest Accrued on Notes Receivable		12.00	
Total Current Assets			$38,092.00
Fixed Assets:			
Store Equipment	725.00		
Less Reserve for Depreciation	132.25	592.75	
Delivery Equipment	1,500.00		
Less Reserve for Depreciation	322.50	1,177.50	
Total Fixed Assets			1,770.25
Deferred Charges to Expense:			
Insurance Prepaid		100.00	
Supplies Inventory		47.00	
Total Deferred Charges			147.00
Total Assets			$40,009.25

LIABILITIES AND PROPRIETORSHIP

Current Liabilities:		
Notes Payable	$ 9,000.00	
Accounts Payable	8,140.00	
Salaries Accrued	90.00	
Interest Accrued on Notes Payable .	18.00	
Total Current Liabilities		$17,248.00
Proprietorship:		
John Haynes, Proprietor		22,761.25
Total Liabilities and Proprietorship . . .		$40,009.25

The closing entries. An examination of the profit and loss columns of the working sheet shows what accounts must be closed in order to summarize the results of the period's operations. Those columns show the revenue accounts which still have balances, and the amount of each such balance after the adjusting entries are made and posted. Taking the balances of the revenue accounts as they appear on the working sheet after being adjusted, the closing entries necessary to summarize them are as follows:

July 31		
Purchase Returns and Allowances. .	$ 650.00	
Purchases		$ 650.00
To close purchases returns and allowances account into purchases account		
31		
Purchases	220.00	
Freight and Cartage Inward		220.00
To transfer in-freight to purchases account, as part of the cost of goods sold		
31		
Sales	460.00	
Sales Returns and Allowances		460.00
To close sales returns and allowances account into sales account		

31		
Sales	$17,670.00	
Purchases		$17,670.00
To close purchases account and transfer the cost of goods sold to the debit of sales		
31		
Sales	5,495.00	
Profit and Loss		5,495.00
To close sales account and transfer the gross profit on sales to profit and loss account		
31		
Profit and Loss	2,358.75	
Sales Salaries		1,590.00
Advertising		220.00
Depreciation on Store Equipment		7.25
Delivery Expense		182.50
Rent		300.00
Insurance		20.00
Heat and Light		39.00
To close the operating expense accounts and transfer their total to the debit of profit and loss account		
31		
Interest on Notes Receivable	12.00	
Cash Discount on Purchases	245.00	
Profit and Loss		257.00
To transfer the balances of the non-operating income accounts to profit and loss		
31		
Profit and Loss	48.00	
Interest on Notes Payable		18.00
Loss from bad debts		30.00
To close the non-operating expense accounts and transfer their balances to profit and loss		

31

Profit and Loss	$3,345.25	
John Haynes, Capital		$3,345.25
To close profit and loss account and transfer the net profit for the fiscal period to the proprietor's capital account		

31

John Haynes, Capital	50.00	
John Haynes, Personal		50.00
To transfer the balance of the proprietor's personal account to his capital account		

After these "closing" entries have been posted, and all the accounts which are in balance ruled to indicate that fact, the accounts which will still remain open and show balances will be only the asset accounts, liability accounts, and the proprietor's capital account. The information furnished by the balances of the accounts remaining open in the ledger will be exactly the same as that furnished by the balance sheet at the close of the period, as illustrated on page 325.

The post-closing entries. In the chapter on "Accruals and Deferred Items," it was explained that it was customary to transfer the amount of accrued items back to the appropriate income or expense accounts after the books had been closed. The reasons for such transfers were explained in that chapter, along with the effect in correcting the balance of the income or expense account affected with respect to its showing for the coming period. In the case of the business of John Haynes, there are three accruals to be considered: (1) accrued interest receivable, (2) accrued interest payable, and (3) accrued salaries. The supplies inventory account must also be closed back into the expense accounts that were credited when it was set up. This is an awkward feature of the method of adjustment used for those deferred charges, and could have been avoided by a better arrangement of the accounts, as was previously explained. The entries necessary to close these accounts are as follows:

31		
Interest on Notes Receivable	$12.00	
Interest Accrued Receivable		$12.00
To close the interest accrued receivable into the interest on notes receivable account		
31		
Interest Accrued Payable	18.00	
Interest on Notes Payable		18.00
To close the interest accrued payable into the interest on notes payable account		
31		
Delivery Expense	30.00	
Heat and Light	17.00	
Supplies Inventory		47.00
To close the deferred charge account into the expense accounts affected		
31		
Salaries Accrued	90.00	
Sales Salaries		90.00
To close the salaries accrued into the sales salaries account		

The post-closing trial balance. It has been explained that at the end of a fiscal period a *preliminary trial balance* is taken to make sure that there is an equality between the debits and credits which have been posted to the accounts. Adjustments to the accounts as shown by that trial balance are then made, on the basis of such supplementary information as is obtainable, by means of *adjusting entries* in the journal, which are posted to the accounts. The accounts are then summarized to show the result of the period's operations by means of the *closing entries*, after which the accrued items are carried back to the revenue accounts to which they pertain by means of *post-closing entries.* In order to insure to some extent the accuracy of all these entries, at least to the extent of an equality between their debits and credits, it is customary to take a *post-closing trial balance* before proceeding with the entries of the following period. Such a

post-closing trial balance taken from the ledger of John Haynes would appear as follows:

JOHN HAYNES

POST-CLOSING TRIAL BALANCE, JULY 31, 1920

Cash	$ 5,120.00	
Accounts Receivable	15,990.00	
Notes Receivable	4,000.00	
Merchandise Inventory	13,000.00	
Store Equipment	725.00	
Reserve for Depreciation on Store Equipment		$ 132.25
Delivery Equipment	1,500.00	
Reserve for Depreciation on Delivery Equipment		322.50
Accounts Payable		8,140.00
Notes Payable		9,000.00
Sales Salaries		90.00
Insurance Prepaid	100.00	
John Haynes, Capital		22,761.25
Reserve for Bad Debts		30.00
Delivery Expense	30.00	
Heat and Light	17.00	
Interest on Notes Payable		18.00
Interest on Notes Receivable	12.00	
	$40,494.00	$40.494.00

When the equality of the debits and credits has been ascertained by means of a post-closing trial balance like the one shown above, the ledger is then ready to have posted to it the transactions of the new accounting period.

QUESTIONS FOR CLASS DISCUSSION

1. Assuming any type of business you please, make a list of facts concerning that business which would necessitate ten different adjusting entries at the end of the fiscal period, and give the entries.
2. Outline step by step the order of procedure which you would follow in "closing the books" and preparing the financial statements of a business at the end of its fiscal period. Justify the order indicated in your answer.
3. Under what circumstances would it be worth while to include in the working sheet an "adjusted trial balance"?

4. From the information shown by the working sheet in the illustrative exercise in chapter xxviii, construct journal entries necessary to set up a summary account headed "Trading," the balance of which shall represent the gross trading profit for the period, and to close this account into profit and loss.
5. What journal entries would be necessary to record the following:
   a) An appropriation of the net earnings of a corporation for dividends amounting to $7,500.00?
   b) An appropriation of earnings for the addition of $5,000.00 to reserve for redemption of bonds?
   c) An appropriation of earnings to the amount of $10,000.00 for the purpose of reducing the amount of discount on stock?
6. Should you always use a working sheet in preparing the statements at the end of a fiscal period? If not, under what circumstances might you dispense with its use?

REFERENCES FOR FURTHER STUDY

Esquerré, Paul-Joseph, *Applied Theory of Accounts*, chap. xxxiv.
Paton, W. A., and Stevenson, R. A., *Principles of Accounting*, chaps. viii and ix.
Klein, J. J., *Elements of Accounting*, chap. ix.
Hatfield, H. R., *Modern Accounting*, chap. xv.

LABORATORY EXERCISE NO. 34

The following trial balance was taken from the books of the Moore & Smith Hardware Company, December 31, 1919:

	DEBIT	CREDIT
Cash on hand	$ 100.00	
Cash in bank	3,000.00	
Sales		$1,150,000.00
Discounts on purchases		20,000.00
Interest on notes receivable		1,000.00
Accounts receivable	150,000.00	
Notes receivable	10,000.00	
Capital stock (common)		200,000.00
Real estate	50,000.00	
Buildings	200,000.00	
Equipment	50,000.00	
Horses, wagons, and harness	5,000.00	
Motor trucks	5,000.00	
Insurance	2,000.00	

	DEBIT	CREDIT
Taxes	$ 5,000.00	
Purchases	900,000.00	
Discounts on sales—cash	20,000.00	
Wages of men in warehouse	25,000.00	
Salaries of department managers	10,000.00	
Salaries of office assistants	5,000.00	
Drivers, teamsters, etc.	5,000.00	
Horse feed	2,000.00	
Auto expense	1,500.00	
Inventories, January 1, 1919	300,000.00	
Inventories of horse feed, auto accessories, etc., January 1, 1919	3,000.00	
Inventories of stationery, advertising, etc., January 1, 1919	2,000.00	
Office supplies, stationery, etc.	3,000.00	
Advertising	50,000.00	
Salesmen's salaries	20,000.00	
Salesmen's commissions	11,000.00	
Interest on notes payable	10,000.00	
Fund for payment of dividends	12,000.00	
Notes payable		$250,000.00
Accounts payable		138,000.00
Dividends payable		12,000.00
Real estate—not used in business	150,000.00	
Investment in Union Hotel Company (at cost)	50,000.00	
Sprinkler system—at face of contract	10,000.00	
Liability on sprinkler system		8,000.00
Surplus		290,600.00
	$2,069,600.00	$2,069,600.00

On December 31, 1919, the company authorized the issue of $300,000.00 cumulative 7 per cent preferred stock and sold same to the Grand Investment Company at 97. $70,000.00 common stock was sold to the present stockholders at par, the total issue of common stock being $270,000.00. Of the proceeds of these sales $150,000.00 was to be expended on new buildings, the balance to be retained for working capital.

The inventories at December 31, 1919, were:

Merchandise	$325,000.00
Horse feed, auto accessories, etc.. . .	2,000.00
Stationery, advertising, etc.	1,500.00

Of the insurance paid, $500.00 applies to the year 1920; also $1,500.00 of the taxes.

Of the interest $2,000.00 applies to the period subsequent to January 1, 1920.

The depreciation of buildings for the year is $10,000.00, and of equipment, $5,000.00. The real estate not used in business has appreciated $50,000.00, while that used in business has been appraised at $75,000.00.

From the foregoing trial balance and data prepare and submit:

1. Working sheet.
2. Adjusting and closing entries.
3. Balance sheet.
4. Statement of profit and loss.

CHAPTER XXIX

THE CLASSIFICATION OF ACCOUNTS

The purpose served by the accounts. It has been repeatedly emphasized that the accounts are the means of analyzing information concerning the financial operations and status of the business in such a manner as to make this information available for reporting purposes. The account has been defined as a systematic record of information pertaining to some item appearing on the accounting reports, this information being arranged under an appropriate title. Since each account contains information pertaining to some item which is to appear on the reports, the number of the accounts and the basis upon which they will be classified and subdivided will depend in every case upon the nature of the reports desired for the particular business and the amount of detail these reports are to contain. In other words, the items with which accounts will be carried are entirely dependent on the items to be shown in the reports.

The reports which have been discussed and illustrated up to this point in the course are all of the simplest and most conventional type. In fact, only the two forms which are in almost universal use, the balance sheet and the statement of profit and loss, have been considered. These two statements, however, furnish information concerning the fundamental facts of the business—those having to do with the status of the investment and the nature and net result of the current operations. Any other reports taken directly from the accounts must consist for the most part of information concerning these same facts, reclassified to be of greater assistance to some functional manager, or to show more detail with regard to some particular kind of assets, liabilities, proprietorship, or some phase of operations. It is true that, in addition to the reports prepared from the information shown by the accounts, there may also be some very useful reports made up from statistics gathered from other sources and not appearing in the accounts.

Since the accounting reports other than the balance sheet and statement of profit and loss are mainly rearrangements or elaborations

of certain facts shown in one or the other of these two statements, the general scheme upon which the accounts will be classified may very well follow the arrangement of the items in these two general reports. Whether any of the items of information required for either of these two statements will be further classified in the accounts will depend on the nature of the additional accounting reports which will be required for the use of the management of the particular business. In the following discussion it will be impracticable to do more than suggest the possibility of such sub-classifications, and the classification shown will be the one determined by the form of the balance sheet and the statement of profit and loss.

The fundamental classification of accounts. There is certain fundamental information which the owner or manager of any business will desire to have available. This information concerns: (1) the financial condition of the business, which is shown by the balance sheet, and (2) the nature and results of the business operations for the current accounting period, which is shown by the statement of profit and loss. In view of these facts it would be logical to assume that the fundamental classification of accounts should be twofold: (1) the accounts reflecting financial condition, which appear on the balance sheet; and (2) the accounts reflecting the nature and results of business operations, which appear in the statement of profit and loss. This classification of accounts into balance sheet accounts and profit and loss accounts is one that is used by several writers of high standing. The first class of accounts is ordinarily designated as the "real" accounts, while the second class is variously designated as "nominal," "economic," and the "revenue" accounts.

Such a division of accounts into these two broad classes undoubtedly exists, but this classification overlooks the very important point that the balance sheet items are divisible into two classes, each of which is quite distinct in its nature, and each of which is co-ordinate in rank with the other, and with the revenue group of accounts. The first of these two classes consists of these accounts which show the assets owned by the business and the claims which creditors hold against those assets; and the accounts of this group may therefore be termed the *property* accounts. The second class shows the net investment in the business of the proprietor or proprietary group and the accounts composing this class may be termed the *proprietorship*

accounts. In view of these facts it would seem desirable that a threefold classification of accounts should be adopted, as follows: (1) property accounts; (2) proprietorship accounts; (3) revenue accounts.

To one who has followed the discussion contained in the previous chapters of the use, construction, and interpretation of accounts, this classification will seem a perfectly natural and logical one. Property accounts include accounts with assets, showing the amount of various kinds of property owned by the business, along with any valuation accounts used to show corrections on the value of such assets. The property accounts also include the liability accounts, which show the claims which the creditors of the business hold against the assets of the business. Proprietorship accounts include such accounts as may be used to show the amount of the net proprietorship of the business, this amount being the difference between its total assets and total liabilities. Revenue accounts include all accounts showing the amount and sources of different types of income accruing to the business during the current accounting period, as well as all accounts showing the amount and kinds of expenses incurred in securing that income, and all deductions to be made from it before the net income of the business can be ascertained. The property accounts and proprietorship accounts furnish the information which is used in preparing the balance sheet, and the revenue accounts furnish the information shown by the statement of profit and loss. These three main classes, with their subdivisions, will be discussed in the order in which they have been listed.

The property accounts. As explained in the foregoing paragraph, the property accounts consist of the accounts which show the value of the property, or assets, owned by the business, and of the accounts with the liabilites, or claims outstanding against those assets. The two main groups of property accounts, then, are the *asset* accounts and the *liability* accounts, and these will be considered in that order.

The classification usually shown on the balance sheet for the asset accounts is as follows: (1) current assets; (2) deferred charges to income; (3) fixed assets.

The liability accounts are usually shown on the balance sheet in two groups, which are as follows: (1) current liabilities; (2) fixed

liabilities. The typical accounts with both these classes of liabilities have been rather fully discussed in the previous chapters, with reference to the nature and construction of the accounts involved, and to the method of reporting these items on the balance sheet. They will require no further discussion at this point. The manner in which these items are reported, as well as the nature of the accounts included under each of these heads, has already been discussed to such an extent as to make further consideration at this point unnecessary.

Illustration of the property accounts. On the basis of the fundamental classification indicated in the present chapter, and of the discussion of the nature of particular accounts given in earlier chapters, an outline of the property accounts in a more or less typical business concern may be drawn up as follows:

I. Property accounts
  A. Assets accounts
    1. Current assets
      a) Cash
      b) Notes Receivable
        (1) Notes Receivable Discounted
      c) Accounts Receivable
        (1) Reserve for Bad Debts (valuation account)
      d) Merchandise Inventory
      e) Accrued Interest Receivable
    2. Deferred charges
      a) Prepaid Advertising
      b) Unexpired Insurance
      c) Inventory of Current Supplies
    3. Fixed assets
      a) Store Equipment
        (1) Reserve for Depreciation of Store Equipment
      b) Delivery Equipment
        (1) Reserve for Depreciation of Delivery Equipment
      c) Office Equipment
        (1) Reserve for Depreciation of Office Equipment
      d) Buildings
        (1) Reserve for Depreciation on Buildings
      e) Land

B. Liability accounts
  1. Current liabilities
    a) Notes Payable—Banks
    b) Notes Payable—Trade Creditors
    c) Accounts Payable
    d) Accrued Wages
    e) Accrued Interest Payable
  2. Fixed liabilities
    a) Mortgages Payable
    b) Bonds Payable

This list of acounts is intended to be suggestive rather than exhaustive. If the student understands clearly the basis of the classification, he should have no difficulty in locating in this classification the proper place of any additional items which he may encounter in practice.

The proprietorship accounts. It should be quite clear by this time that the proprietorship accounts are the accounts which represent the amount of the net investment of the owner or owners of the business. This is the excess of the total assets over the total liabilities. In a previous chapter dealing with the construction and interpretation of the proprietorship accounts it was explained that the individual accounts with proprietorship will differ somewhat in their nature according to the form of organization under which the business is carried on. The three common forms of business organization—the single proprietorship, the partnership, and the corporation—were considered with respect to the method used to show the proprietorship of each.

In the case of a single proprieter, two such accounts will ordinarily be found in use: (1) the proprietor's capital account, and (2) the proprietor's personal account. It was explained that the personal account was used to show the proprietor's drawings and the amount of any salary allowance with which he might credit himself. This account is usually closed in to the capital account at the end of the accounting period, so that the balance sheet of the single proprietor will usually show only one account with proprietorship.

If the business under consideration is a single proprietorship, then, the proprietorship group of accounts will be very simple, and may be shown as follows:

II. Proprietorship accounts
- a) John Haynes, Capital
- b) John Haynes, Personal

In the partnership there will be a capital account and a personal or drawing account for each partner. Sometimes a portion of the partnership profits is not immmediately distributed to the partners' accounts, but is carried for a while in an undivided profits account. Thus if the business used for illustration were a partnership, operating under the name of Adams & Jones, the partners being F. A. Adams and P. R. Jones, the proprietorship accounts carried might be as follows:

II. Proprietorship accounts
- a) F. A. Adams, Capital
- b) F. A. Adams, Personal
- c) P. R. Jones, Capital
- d) P. R. Jones, Personal
- e) Undivided Profits

In a corporation the accounts with proprietorship consist of the account or accounts showing the capital stock outstanding, at its par figure, the accounts showing the amount of the discount or premium at which such stock was actually issued, the accounts showing the amount of net earnings which have been appropriated for specific purposes, and the amount of the unappropriated surplus, or proprietorship in excess of the par of capital stock. In case the investment represented by the par of the stock has been impaired by operating or other losses, this fact will be reflected by a deficit account. If the business used for illustration were the Haynes Company, a corporation, the proprietorship group of accounts might show the following accounts:

II. Proprietorship accounts
- 1. Capital Stock
  - a) Common Stock
    - (1) Discount on Common Stock[1] (if stock issued at discount)
  - b) Preferred Stock
    - (1) Discount on Preferred Stock[1] (if stock issued at discount)

[1] Discount on Stock and capital Surplus will not both appear on the same balance sheet, since one represents a deduction from the par of the capital stock and the other an addition. Where some stock is issued at a premium and other at a discount, the two will be offset against one another, and only the net result will be shown.

2. Reserves
   a) Reserve for Addition to Plant
   b) Sinking Fund Reserve
   c) Reserve for Redemption of Bonds
3. Capital Surplus (if stock issued at a premium)
4. Surplus

The revenue accounts. The third of the three main groups into which accounts have been divided by the classification here adopted is that of the *revenue* accounts. The revenue accounts, as previously stated, consist of (1) the *income* accounts, which show the sources and amount of the income of the business for the current fiscal period, and (2) the *expense* accounts, which show the kinds and amount of the expenses incurred in the process of securing that income.

In a previous chapter on the construction and interpretation of income accounts it was explained that the income accounts are to be divided into two main groups. These two groups were also illustrated in the statement of profit and loss shown in the chapter preceding this one. They are: (1) operating income accounts; (2) non-operating income accounts, or "other" income accounts.

It was explained in the chapter on the construction and interpretation of expense accounts, and illustrated in the statement of profit and loss just referred to, that the expense accounts are also divided into two main groups, as follows: (1) operating expense accounts; (2) non-operating expense accounts, or "deduction from income" accounts.

The operating expenses are susceptible of very elaborate classification, where the size and complexity of the business enterprise justifies it. As has been previously suggested, both the operating income and expense accounts may be classified in such a manner as to show operating income and operating expense for each department of a business, and also to show a classification of each department's expenses according to the kind of services rendered. No attempt will be made to show any such elaborate classification in this chapter. The classification indicated in the following pages will be for the business as a whole, on the assumption that no departmental organization exists. Where departmental organization does exist, the classification of revenue accounts by departments may extend only to the trading accounts, so that it is possible to report the gross profit on sales by

departments, with no attempt to classify other operating expenses on a departmental basis. On the other hand, a systematic attempt may be made to show all operating expenses classified according to the departments to which they are chargeable, so that net operating profit may be reported by departments. The classification of accounts in this chapter is for the business as a whole, but it should not be difficult for the student to see how a similar classification of accounts might be made for each department of a business, the extent and the details of such classification being modified by the reporting requirements of the particular business and department.

A simple classification of operating expenses according to the type of services performed is as follows: (1) cost of sales accounts; (2) buying expense accounts; (3) selling expense accounts; (4) delivery expense accounts; (5) administrative expense accounts.

The cost of sales accounts, which furnish the information necessary to ascertain the cost of the goods sold, are not usually thought of as expense accounts, or termed expense accounts in the statement of profit and loss. They do, however, represent a part of the cost of the product or service sold, and even though they are somewhat different in their nature from the other operating expense accounts, they have enough in common with them to justify including them under expense in the present classification.

Each of the classes of operating expense listed above has been sufficiently discussed in a previous chapter to make further consideration at this point unnecessary.

Illustration of the revenue accounts. Taking the basis of classification previously indicated, and assuming a mercantile business whose operations are not to be classified by departments, the more common and representative revenue accounts may be outlined as follows:

III. Revenue accounts
- A. Income accounts
  - 1. Operating income
    - *a*) Merchandise Sales
      - (1) Sales Returns and Allowances
  - 2. Non-operating income
    - *a*) Interest on Notes Receivable
    - *b*) Interest on Securities Held
    - *c*) Rentals Earned
    - *d*) Cash Discount on Purchases

B. Expense accounts
- 1. Operating expenses
  - *a*) Cost of Sales
    - (1) Merchandise Purchases
      - (*a*) Purchases Returns and Allowances
    - (2) Freight, Express, and Cartage Inward
      (Purchases account to be adjusted for the change in merchandise inventory)
  - *b*) Buying Expense
    - (1) Salaries of Buyers
    - (2) Traveling Expense—Buyers
    - (3) Office Expense
    - (4) Other Buying Expense
  - *c*) Selling Expenses
    - (1) Salaries of Sales Force
    - (2) Expenses of Salesmen
    - (3) Advertising
    - (4) Office Expense
    - (5) Packing and Shipping Expense
    - (6) Other Selling Expense
  - *d*) Delivery Expenses
    - (1) Wages of Drivers
    - (2) Maintenance and Repairs—Delivery Equipment
    - (3) Depreciation of Delivery Equipment
    - (4) Other Delivery Expense
  - *e*) Administrative Expense
    - (1) Office Salaries
    - (2) Office Expense
    - (3) Repairs and Maintenance of Buildings (or rent)
    - (4) Depreciation of Buildings
    - (5) Repairs and Maintenance of Equipment
    - (6) Depreciation of Office Equipment
    - (7) Insurance and Taxes
    - (8) Heat and Light
    - (9) Other Administrative Expense
- 2. Non-operating expenses
  - *a*) Interest on Notes Payable
  - *b*) Cash Discount on Sales

This list of revenue accounts is by no means exhaustive, but it shows the accounts which are more frequently found in use. The classification is not an exact or a scientific one, such as would be used

in a big department store or other type of business concern where it was considered worth while to allocate operating expenses carefully between departments and between kinds of expense or service rendered. However, the discussion of accounts and their use up to this point has not been such as to prepare the student for a consideration of any more elaborate or exact classification than the one shown above. The principles of classification are well illustrated here, and the consideration of further refinements in account classification must be deferred to a later time.

Numbering of accounts. In any business possessing a well-developed accounting system, some definite classification of accounts will be worked out and maintained. A classification along the lines indicated, further subdivided to show departmental organization or further division of functions in the business, would be an entirely satisfactory one. In this classification, however, no adequate method is provided for referring to the individual accounts, since the same letters and figures are used to indicate different items under various heads and subheads. Also, with the system employed to list the accounts, the addition of a new item or class of items might involve some difficulty in a rearrangement of the numbering. In order to facilitate the classification of accounts, and the reference to particular accounts in a system, accountants have adopted a system of numbering accounts which is a modification of the Dewey decimal system used in cataloguing the contents of a library. Under this system each account has a separate number, which is usually written before the descriptive name of the account, and which serves to place the class to which that account belongs. This number may even be used instead of the descriptive name in referring to the account.

The use of this system may be best explained by a description and illustration of the method of its application, using the same classification of accounts that was given above. In that classification, the three main groups into which all accounts were divided were property accounts, proprietorship accounts, and revenue accounts. These primary classes will each be given a number consisting of a single digit, thus:

1. Property accounts
2. Proprietorship accounts
3. Revenue accounts

Every account which falls under the head of property accounts will therefore have a number the first digit of which is 1, every proprietorship account will have a number the first digit of which is 2, and every revenue account will have number in which 3 is the first digit. For example, the two main classes into which the property accounts are divided will be numbered as follows:

11. Asset accounts
12. Liability accounts

Every account which is classified under the asset group will therefore have a number of which the first two digits are 11, and in the same way the first two digits of any number indicating a liability account will be 12. The same procedure is followed with all the subclasses of accounts. Where it is necessary to show a "valuation" account, or account representing a deduction from another item, it is listed just below the item from which it is to be deducted, and its nature is indicated by introducing zero before the last digit, the digits used being otherwise the same as those used for the account from which the deduction is to be made.

Illustration of the numbering of accounts. With this brief explanation in mind, it should not be difficult to understand the principles of this system as applied to the classification of accounts previously given. In illustrating this, it will be assumed that the proprietorship accounts are those of a corporation. The illustration follows:

1. Property accounts
    11. Asset accounts
        111. Current assets
            1111. Cash
            1112. Notes Receivable
            11102. Notes Receivable Discounted
            1113. Accounts Receivable
            11103. Reserve for Bad Debts
            1114. Merchandise Inventory
            1115. Accrued Interest Receivable
        112. Deferred charges
            1121. Prepaid Advertising
            1122. Unexpired Insurance
            1123. Inventory of Current Supplies

113. Fixed assets
 1131. Store Equipment
 11301. Reserve for Depreciation of Store Equipment
 1132. Delivery Equipment
 11302. Reserve for Depreciation of Delivery Equipment
 1133. Office Equipment
 11303. Reserve for Depreciation of Office Equipment
 1134. Buildings
 11304. Reserve for Depreciation of Buildings
 1135. Land
12. Liability accounts
 121. Current liabilities
 1211. Notes Payable—Banks
 1212. Notes Payable—Trade Creditors
 1213. Accounts Payable
 1214. Accrued Wages
 1215. Accrued Interest Payable
 122. Fixed liabilities
 1221. Notes Payable (not current)
 1222. Mortgages Payable
 1223. Bonds Payable
2 Proprietorship accounts
 21. Capital stock
 211. Common Capital Stock
 2101. Discount on Common Stock
 212. Preferred Capital Stock
 2102. Discount on Preferred Stock
 22. Reserves
 221. Reserve for Addition to Plant
 222. Sinking Fund Reserve
 223. Reserve for Redemption of Bonds
 23. Capital Surplus
 24. Surplus
3 Revenue accounts
 31. Income accounts
 311. Operating income
 3111. Merchandise Sales
 31101. Sales Returns and Allowances
 312. Non-operating income
 3121. Interest on Notes Receivable
 3122. Interest on Securities Held
 3123. Rentals Earned
 3124. Cash Discount on Purchases

- 32. Expense accounts
  - 321. Operating expenses
    - 3211. Cost of Sales
      - 32111. Merchandise Purchases
      - 321101. Purchase Returns and Allowances
      - 32112. Freight, Express, and Cartage Inward
    - 3212. Buying Expense
      - 32121. Salaries of Buyers
      - 32122. Traveling Expense—Buyers
      - 32123. Office Expense
      - 32124. Other Buying Expense
    - 3213. Selling Expense
      - 32131. Salaries of Sales Force
      - 32132. Expenses of Salesmen
      - 32133. Advertising
      - 32134. Office Expense
      - 32135. Packing and Shipping Expense
      - 32136. Other Selling Expense
    - 3214. Delivery Expense
      - 32141. Wages of Drivers
      - 32142. Maintenance and Repairs—Delivery Equipment
      - 32143. Depreciation and Delivery Equipment
      - 32144. Other Delivery Expense
    - 3215. Administrative Expense
      - 32151. Office Salaries
      - 32152. Office Expense
      - 32153. Repairs and Maintenance of Buildings
      - 32154. Depreciation of Buildings
      - 32155. Insurance and Taxes
      - 32156. Heat and Light
      - 32157. Other Administrative Expense
  - 322. Non-operating expenses
    - 3221. Interest on Notes Payable
    - 3222. Cash Discount on Sales
    - 3223. Exchange

Lack of uniformity in classification and numbering of accounts This scheme of numbering is a simple one and is easily applicable to the numbering of accounts in a business as simple in organization as the one assumed for purposes of illustration. A more elaborate classification of accounts would soon cause the numbering to become awkward and cumbersome, on account of the number of digits

involved. It is quite possible, however, to modify the numbering system to handle a more complex classification without confusion.

An example of such a classification is to be found in the uniform classification of accounts prescribed by the Interstate Commerce Commission for the steam railroad companies which fall under the regulation of that body.

The fundamental classification of accounts given in this chapter is a threefold one, dividing account into: (1) property accounts, (2) proprietorship accounts, and (3) revenue accounts. The difference between this threefold classification and a twofold classification of accounts into real and nominal accounts is largely one of terminology rather than of basic principles. There is, however, a real difference in principle involved in the fact that the threefold classification recognizes that the "real" or balance-sheet accounts fall into two main classes, each of which is co-ordinate in importance with the "nominal," "economic," or "revenue" group of accounts. Aside from this point, the classification given here differs very little in purpose and result from the classifications given by John R. Wildman, Roy B. Kester, Thomas W. Mitchell, and other well-known modern writers on the subject of accounting.

QUESTIONS FOR CLASS DISCUSSION

1. What real distinction, if any, is to be made between a classification of accounts into "real" accounts and "nominal" accounts, and their classification into "property" accounts, "proprietorship" accounts, and "revenue" accounts? Is either basis of classification more logical than the other? Discuss.
2. Make as long a list as you can of factors which might affect the classification of the accounts of any business.
3. The Gross Shoe Company has retail stores in five different cities. In each they own the building in which they operate, as well as all the equipment used in carrying on the business. The home office is in Chicago, but each store is in charge of a local manager. The merchandise is all purchased by the central organization, and supplied by it to the various branches. Do these facts suggest to you the desirability of any further sub-classification of the accounts than is shown in the illustrations in chapter xxix? Answer this question with regard to: (1) the asset accounts, (2) the liability accounts, (3) the proprietorship accounts, (4) the income accounts, (5) the expense accounts.

4. What groups of accounts, if any, would need to be rearranged or classified in more detail than that shown in chapter xxix to serve the reporting requirements of a department store? a manufacturing business?
5. In the illustrative classification given in chapter xxix, the operating expense accounts are divided into five groups. Can you suggest any further division that might be made of the operating expenses of a business? What purpose might be served by a more elaborate classification of operating expenses according to the type of service performed?
6. Various members of the managerial staff of a large department store require analyses of sales for different purposes. In order to satisfy these various requirements, the accounting department must prepare a sales analysis on each of the following bases:
   a) Sales analyzed by departments
   b) Sales analyzed by terms of sale
   c) Sales analyzed by method of sale
   d) Sales analyzed by method of delivery
   e) Sales analyzed as between rush and normal deliveries
   f) Sales analyzed by salesmen

   What purpose should you expect to be served by each of the foregoing analyses? What member of the managerial staff would be apt to be interested in each?
7. Should you consider it necessary or desirable to provide an analysis of purchases on each of the foregoing bases? on any of them? On how many of these bases should sales deductions be analyzed? Discuss.
8. Should you consider it desirable to attempt to maintain in the ledger accounts all the classifications suggested in Question 6? If not, which ones should you maintain in the accounts? Suggest the means by which each of the classifications not provided by the ledger accounts might be made available.

REFERENCES FOR FURTHER STUDY

Wildman, J. R., *Principles of Accounting*, chap. xi, pp. 128–29.
Dickinson, A. L., *Practice and Procedure*, pp. 36, 56–62, 154, 162.
Paton, W. A., and Stevenson, R. A., *Principles of Accounting*, chaps. vi and vii.
Esquerré, Paul-Joseph, *Applied Theory of Accounts*, chap. xii.

CHAPTER XXX

FINANCIAL REPORTS

Nature and purpose of financial reports. It has been repeatedly stated in the preceding chapters that the end and aim of the accounting process is furnishing information for reports which will be of aid in the conduct of the business. It is the purpose of this chapter to consider somewhat more carefully the method of presentation to be employed when the necessary data are available. The reports which may be prepared from the accounts are all of a financial nature; that is to say, they deal with facts about the business which may be expressed in terms of dollars and cents. They may therefore be properly referred to as *financial* reports. It is quite likely, as has been suggested, that in many businesses statistical data will be gathered by means of supplementary records having no direct connection with the accounting system proper. Some of this information may be of a financial nature, and some of it may be in terms of non-financial units. An illustration of such statistics is furnished by the operating statistics of a railroad, which show among other things the number of "ton-miles" of freight hauled during an operating period, and the number of "passenger-miles" as well. A manufacturing company may keep records of production of individual workmen and individual machines in terms of units of product. A department store may keep records concerning deliveries of goods from its departments and to different sections of the territory it serves, these facts being expressed in non-financial terms. The discussion of non-financial statistics and reports, however, which may be as important in their way as the financial ones, cannot be given a place in this text.

This chapter will be devoted to the more generally used forms of financial reports (more or less conventional in their form) prepared from the information furnished by the ledger accounts. This will involve the explanation of some modifications of methods of presentation already shown, and the introduction of certain additional reports.

The conventional financial reports. Throughout the discussion of accounting reports in the earlier chapters, two forms of report, the

balance sheet and the statement of profit and loss, have been used as typical of all such reports. Accountants and business men formerly thought that these were the only reports necessary. In fact, in many cases they failed to realize that it was possible to prepare any other reports from the information furnished by the accounts of the business. In recent years, however, as business problems have become more complex, and as a higher grade of managerial skill has developed to meet these problems, managers have come to realize the need of information in addition to that furnished by these two conventional statements.

The attempt which accountants have made to furnish such information has taken two forms: (1) the modification, rearrangement, and improvement of the conventional accounting reports; (2) the preparation of additional accounting and statistical reports: (*a*) reports showing the results of business operations in the period or periods past, (*b*) estimates of various phases of future operations, based on the records of past operations and designed to aid the management in planning for the future.

Any consideration of the subject of estimates must be omitted from this text, though it constitutes a very important part of accounting for managerial purposes. Some consideration will be given, however, to the modern forms of the conventional accounting reports, and to certain additional reports which are now in wide use.

Exhibits. The reports prepared by the accountant which set forth the basic facts of the financial condition of a business are usually termed *exhibits.* An exhibit, in accounting, may be defined as a *summarized* statement of facts with regard to the financial condition of a business. The exhibits which are usually prepared by the accountant are three in number, and are as follows: (1) the balance sheet, generally designated as "Exhibit A"; (2) the statement of profit and loss, generally designated as "Exhibit B"; (3) an analysis of the surplus account, generally designated as "Exhibit C."

The present tendency in the preparation of these fundamental reports is to condense the information shown by them to such an extent as to free it from a great deal of detail, thereby making it more readily readable. Such a statement is designed to present almost at a glance the salient facts concerning that particular phase of the financial condition or operations of the business. The exhibits are intended

to present to the manager, owner, or other interested party a "bird's-eye view" of the financial condition of the business. This does not mean that the reader is to be left in the dark with regard to the individual items which make up the more important totals shown by these reports. This detailed information is presented in separate statements, accompanying and supporting the exhibits. These supplementary statements are discussed below.

Schedules. The supplementary statements which furnish information with respect to detail composing the more important items shown in the exhibits are known as *schedules.* A schedule, in this sense, is a detailed list of the individual items composing the total of some item which appears in an accounting report. Thus schedules may be prepared in connection with the balance sheet. They are designated numerically, as "Schedule No. 1," "Schedule No. 2," etc. Schedules may be used to show detail with regard to the cash balance, the notes receivable and payable, the accounts receivable and payable, the buildings or equipment owned by the business, the reserve for depreciation maintained for each, the securities owned, or any other item on the balance sheet which may be of sufficient importance. When any item on the balance sheet is supported by a schedule it is customary to indicate that fact by giving a reference to the schedule in connection with the statement of the item on the exhibit. Thus, taking for illustration the item of "Cash," which would ordinarily appear first on the balance sheet, this item would be shown in the balance sheet as a single item, as follows:

Cash (Schedule No. 1)	$22,350.00

SCHEDULE NO. 1

THE CASH BALANCE

Continental and Commercial Bank . .	$ 8,250.00
Illinois Trust and Savings Company . .	13,300.00
Home Office Cash Fund	300.00
Milwaukee Branch Office Cash Fund . .	500.00
Total	$22,350.00

Each item on the balance sheet which represents a combination of several items, and which is considered sufficiently important to justify a detailed report as to its component items, is supported by some such schedule.

Analytical statements. The statement of profit and loss will also contain certain items which represent a condensation of more detailed information furnished by the accounts. In order to make available a knowledge of the detail composing such items, supplementary statements are necessary here also, as in the case of the balance sheet items. A number of accountants make no differentiation between the nature of such statements and that of the schedules prepared in support of the balance sheet items, calling them all "schedules." But the analysis of some class of income or of expense seems to differ somewhat in its nature from the mere listing of the assets or the liabilities which make up a certain group total as shown on the balance sheet. For this reason many accountants make it a practice to differentiate between the type of supplementary statement which shows an analysis (called an analytical statement) and the type which is merely a list of certain items composing a total. Such analytical statements are typically presented in connection with items appearing in the statement of profit and loss. "Buying expense" may be used to illustrate the analytical statement. On the statement of profit and loss, in order to avoid making this statement too long and complicated, the buying expenses would be summarized as follows:

Buying expense (Analytical Statement No. 1) . .	$5,300.00

Analytical Statement No. 1, which will accompany the statement of profit and loss, will appear as follows:

ANALYTICAL STATEMENT NO. 1

ANALYSIS OF BUYING EXPENSE

Salaries of buyers	$3,600.00
Traveling expenses of buyers . . .	1,200.00
Office expense—buying	300.00
Miscellaneous buying expense . . .	150.00
Total buying expense	$5,300.00

Similar statements would be prepared for each important group of expenses and in some cases for operating income. As already explained, these supplementary statements are sometimes called schedules and treated as a continuation of the series of schedules begun in connection with the balance sheet. However, the differentiation adopted and illustrated above is a logical one, and represents acceptable accounting practice.

The comparative balance sheet. The form of "exhibit" to which the most attention is usually given is the balance sheet. The information furnished by such a statement is very important, showing as it does the status of the business investment at the end of the operating period. It may be even more significant if the statement furnishes a basis for comparing the facts revealed by the balance sheet at the end of the current period with the facts shown by the balance sheet at the end of the preceding period. Such a comparison may even be profitably extended over several previous periods. Such a basis of comparison is furnished by the comparative balance sheet, an illustration of which is presented on page 354.

None of the changes which may be noted as taking place in the various items of this statement between the end of the preceding period and the end of the current period appears at all startling. Some of the changes, however, will be seen to be rather significant with regard to the company's financial policy for the year. The first thing to be noted is the change in the company's net proprietorship. A glance at that section of the comparative balance sheet shows that the total proprietorship as shown by that group of accounts has increased from $193,835 to $222,345, a net increase of $28,510. This would seem at first glance to indicate that this figure represented the amount of the company's net income for the year. This would be true, provided there had been no contributions made to capital during the year, and that no distribution of surplus had been made in the form of dividends or otherwise. As a matter of fact, the situation is seldom so simple. In order to understand the changes that have taken place in the various proprietorship accounts, the comparative balance sheet must be supplemented by another statement, accounting for these changes.

The analysis of the surplus account. This form of statement was mentioned in a previous paragraph as one of the three chief financial statements usually prepared at the end of a fiscal period, and is usually designated as "Exhibit C." It is designed to show the analysis of the debits and credits which have been made to the general surplus account, and so to account for the changes that may have taken place in the balance of this account and the balances of the proprietary reserve accounts, which represent appropriated surplus.

TAYLOR, JOHNSON AND COMPANY

Comparative Balance Sheet, December 31

Assets	1919		1920	
Current Assets				
Cash		20,600 00		22,350 00
Notes Receivable		22,400 00		26,800 00
Accounts Receivable	43,150 00		50,200 00	
Less Reserve for Bad Debts	400 00	42,750 00	500 00	49,700 00
Merchandise Inventory		52,800 00		45,500 00
Accrued Interest Receivable		35 00		135 00
Total current assets		138,585 00		144,485 00
Fixed Assets				
Delivery Equipment	12,800 00		13,900 00	
Less Reserve for Depreciation	3,100 00	9,700 00	5,700 00	8,200 00
Store Equipment	15,500 00		15,500 00	
Less Reserve for Depreciation	2,800 00	12,700 00	4,400 00	11,100 00
Office Equipment	4,500 00		4,800 00	
Less Reserve for Depreciation	750 00	3,750 00	1,710 00	3,090 00
Building	115,000 00		120,000 00	
Less Reserve for Depreciation	11,000 00	104,000 00	13,400 00	106,600 00
Land		40,000 00		40,000 00
Total fixed assets		170,150 00		168,990 00
Total assets		308,735 00		313,475 00

Liabilities	1919	1920
Current Liabilities		
Due to Contractor	2,000 00	6,710 00
Accrued Interest Payable	150 00	120 00
Wages Accrued	250 00	300 00
Notes Payable—Banks	20,500 00	18,500 00
Notes Payable—Trade Creditors	13,000 00	7,500 00
Accounts Payable	19,000 00	18,000 00
Total current liabilities	54,900 00	51,130 00
Fixed Liabilities		
Bonds Payable	50,000 00	40,000 00
Total liabilities	164,900 00	91,130 00

Proprietorship	1919	1920
Common Capital Stock	100,000 00	100,000 00
Preferred Capital Stock	50,000 00	50,000 00
Reserve for Redemption of Bonds	12,000 00	12,500 00
Reserve for Addition to Building	10,500 00	5,500 00
Surplus	31,335 00	54,345 00
Total proprietorship	203,835 00	222,345 00
Total liabilities and proprietorship	308,735 00	313,475 00

In the case of Taylor, Johnson and Company the changes which affected these accounts were as follows:

1. January 3, 1920, dividends of 2½ per cent on the common stock, and 3½ per cent on the preferred stock, were declared and paid.

2. July 6, 1920, another dividend of the same amount as the above was declared and paid on both common and preferred stock.

3. January 3, 1920, it was voted to appropriate $10,500 more as an addition to the reserve for redemption of bonds.

4. July 2, 1920, $10,000 of the company's bonded indebtedness was retired. This amount was transferred from the reserve account back to the general surplus account.

5. November 12, 1920, an improvement to the building, costing $5,000 was completed and paid for. That amount was transferred from the account with reserve for addition to building back to the general surplus account.

6. Net income for the year, as shown by statement of profit and loss, was $27,010.

The proprietorship accounts affected by these changes, as they would appear at the end of the year after the appropriate entries had been made and posted, are shown below:

SURPLUS

1920				1920			
Jan. 3	Dividends	4,250	00	Jan. 1	Balance	31,335	00
Jan. 3	Reserve for redemption of bonds	10,500	00	July 2	Reserve for redemption of bonds	10,000	00
July 6	Dividends	4,250	00	Nov. 12	Reserve for addition to building	5,000	00
				Dec. 31	Profit and loss	27,010	00

RESERVE FOR REDEMPTION OF BONDS

1920				1920			
July 2	Surplus	10,000	00	Jan. 1	Balance	12,000	00
				Jan. 3	Surplus	10,500	00

RESERVE FOR ADDITION TO BUILDING

1920				1920			
Nov. 12	Surplus	5,000	00	Jan. 1	Balance	10,500	00

In this case the statement showing the analysis of the surplus account would appear as follows:

TAYLOR, JOHNSON AND COMPANY

ANALYSIS OF SURPLUS ACCOUNT FOR THE YEAR ENDED DECEMBER 21, 1920

Balance, January 1		$31,335.00
Add:		
Reserve for redemption of bonds utilized and transferred back to surplus	$10,000.00	
Reserve for addition to building utilized and transferred back to surplus	5,000.00	
Net income for fiscal year	27,010.00	42,010.00
Total		$73,345.00
Deduct:		
Appropriated for dividends	8,500.00	
Appropriated to reserve for redemption of bonds	10,500.00	19,000.00
Balance, December 31, 1920		$54,345.00

With the information furnished by the comparative balance sheet, supplemented by that furnished by the analysis of surplus account, it is possible to draw some fairly definite conclusions with regard to the financial policy of the company during the year 1920. It may be noted first that the net income of $27,010 represents a return of about 12 per cent on the net investment at the end of the year, a satisfactory rate of return. It will be noted next that the total of the current assets has increased from $138,585 to $144,485, a change of $5,900. This is a comparatively insignificant increase, but it is to be noted at the same time that the total of the current liabilities has decreased from $54,900 to $51,130. This means that the "working capital," which is the difference between the current assets and current liabilities, has increased from $83,685 to $93,355, an increase of $9,670, or more than 11 per cent. It also means that the ratio of the current assets to the current liabilities has changed from a little more than two to one to a little less than three to one. Since two to one is the ratio usually considered by the banks as safe, it is apparent that the present ratio is a satisfactory one. An examination of the current assets and current liabilities in detail furnishes some further indications with regard to the trend of the company's

financial policy. Thus it appears that the merchandise inventory has been reduced by $7,300, while at the same time cash, notes receivable, and accounts receivable have increased in amount. This would seem to indicate that the company was reducing its inventory in the expectation of a period of falling prices at the same time that they were selling more than in the previous year, if the trade receivables are to be taken as a guide. This seems to indicate that they are liquidating their current assets as far as is consistent with successful operation, either to be prepared for a contraction of credits by the banks or to take advantage of the expected fall in merchandise prices, if not for both reasons. The considerable reduction that has been effected in the current liabilities seems to point to the same conclusion.

An examination of the fixed assets seems to indicate that the normal rate of depreciation has been charged off. An addition of $1,100 to the amount of delivery equipment would seem to indicate that an increased volume of sales had caused the need of additional equipment of this type. This surmise can be verified only by reference to the comparative statement of profit and loss, which appears on a later page. A slight increase in office equipment also appears, which would seem to indicate some increase in the volume of business. A $5,000 item of addition or improvement to the building also points to a progressive policy on the part of the company.

The redemption of $10,000 of the outstanding bonds of the company, together with the further appropriation of surplus for the redemption of bonds, seems to indicate that the company is following the policy of retiring its bonds in yearly instalments, either by purchasing them on the open market or by calling them in accordance with the terms of the contract with the bondholders, or by paying them serially, as they mature. Thus the bonds might have been issued with different maturities, so that the $10,000 would mature each year until they had all been redeemed.

The amount of the proprietorship in relation to the amount of assets seems very large, and indicates that the business has been quite prosperous. It also indicates that the company is in excellent financial condition, and should be in no great danger of embarrassment from falling prices or from financial stringency. For that matter, the showing made by their comparative balance sheet should entitle them to preferential treatment in applying to the banks for credit.

One of the important uses of such a statement is to serve as an aid to the business in securing credit from the banks, since it furnishes the banker with just the type of information that he requires with reference to the financial soundness of the borrowing concern. Also this form of report, with the analysis of surplus account and the comparative statement of profit and loss, furnishes information of very great value to the owners or managers of the business, enabling them to judge the success of the operations of the current period, and also, in the light of the knowledge thus acquired, to plan for the operations of the coming period.

The comparative statement of profit and loss. It has been demonstrated that there are certain advantages in presenting the balance sheet in the comparative form. Any statistical data, in order to be of the highest significance, must be presented in such a way as to show comparison or relationship between facts. This applies to the facts shown by the balance sheet, and it applies even more to the statistics regarding the operations of the business, shown by the statement of profit and loss. This statement is supposed to present the leading statistical facts with regard to the period's operations, and so to offer a basis for judgment on whether these operations have been efficiently conducted, as well as to suggest how they may be most efficiently conducted during the coming period. Also, the matter of efficiency is a relative one. The fact that the net income of Taylor, Johnson and Company for the year 1920 was more than 12 per cent on the capital invested shows that the management could hardly have been entirely inefficient. But if this represents a lower rate of return on investment than that secured in the previous year, the showing of this fact will lead to an inquiry whether the management has been less efficient or whether the lower rate of return is due to other causes. A form of report which presents a comparison of income and expenses of the current year with income and expenses of one or more previous years may not only raise questions of this nature but may in some cases also indicate the answers.

Such a comparison is still further facilitated if each of the important items in the statement of profit and loss for each year is expressed in terms of its percentage of some other item on that statement which is taken as the base figure. This base figure may be either gross sales or net sales. In the illustration which follows,

gross sales is used as 100 per cent for purposes of establishing comparisons between various items of expense and income for the same period, and between the ratios that such items have to sales in the different periods.

As indicated previously in the discussion of the comparative balance sheet, the comparative statement of profit and loss is also of considerable value in interpreting certain items appearing on the former statement. A comparative statement of profit and loss for Taylor, Johnson and Company for the two years ending December 31, 1920, is shown below:

TAYLOR, JOHNSON AND COMPANY

COMPARATIVE STATEMENT OF PROFIT AND LOSS FOR THE TWO YEARS ENDING DECEMBER 31, 1920

	1919		Percentage	1920		Percentage
Gross sales		242,500 00	100		263,500 00	100
Less sales deductions		4,630 00	1.9		6,250 00	2.4
Net sales		237,870 00	98.1		257,250 00	97.6
Cost of goods sold:						
Gross purchases	165,300 00			182,745 00		
Less purchase deductions	4,850 00			5,420 00		
Net purchases	160,450 00			177,325 00		
Freight, express, and cartage in	1,750 00			1,525 00		
	162,200 00			178,850 00		
Add inventory, Jan. 1	47,650 00			52,800 00		
	209,850 00			231,650 00		
Less inventory, Dec. 31	52,800 00			45,500 00		
Cost of goods sold		157,050 00	64.7		186,150 00	70.8
Gross profit on sales		80,820 00	33.4		71,100 00	26.8
Operating expenses:						
Buying expenses	6,250 00		2.6	5,300 00		2.1
Selling expenses	17,300 00		7.1	15,420 00		5.8
Delivery expenses	6,500 00		2.7	6,215 00		2.4
Credit and collection expenses	5,250 00		2.2	4,800 00		1.8
Administrative expenses	12,650 00		5.3	12,350 00		4.4
		47,950 00	19.9		44,085 00	16.5
Net profit on sales		32,870 00	13.5		27,015 00	10.2
Non-operating income		5,220 00	2.17		4,465 00	1.7
Gross income		38,090 00	15.67		31,480 00	11.9
Other deductions from income		4,620 00	1.9		4,470 00	1.7
Net income		33,470 00	13.7		27,010 00	10.2

This statement of profit and loss is somewhat condensed. Some of the items, such as sales deductions, different groups of operating

expenses, non-operating income, and other deductions from income, might well be supported by analytical statements if so desired, but for purposes of comparison it is doubtful if many of the parties who make use of this report would ever refer to them. For the purposes of this illustration these supplementary reports are omitted, although a business of the size of the one indicated by the foregoing statements, might do well to have such reports prepared.

A study of the comparative statement of profit and loss shown in the foregoing illustration will reveal several significant facts with regard to the financial condition of the company and with regard to its operating policy during the year 1920. In the first place, it will be seen that the facts revealed with regard to the operations of the current year bear out the conclusion drawn from the facts in the comparative balance sheet, to the effect that the company was reducing its inventory in anticipation of a period of falling prices. It also indicates that the company sold more goods than in the preceding period, but at a lower gross profit. Thus not only is the percentage of gross profit lower but also the actual amount of gross profit is less. Assuming that the trade is entering into a period of falling prices, this would seem to indicate a wise policy, in accepting a reasonable profit on the goods now on hand and thereby reducing their inventory, with the expectation of replacing them on a falling market. Another point to be noted is that the company has apparently depended on lower prices as an inducement to its customers to purchase rather than by increasing its selling and other operating expenses. This is indicated by the fact that the operating expenses have been reduced, not only relatively, as indicated by the percentages, but absolutely as well. The net profit is considerably lower in 1920 than in the preceding year, both absolutely and in terms of its ratio to sales. It is still quite satisfactory in amount, however, and does not necessarily indicate that the management has been inefficient. It is probable that the profits for the past few years have been unusually high, owing to the rising market, and it would seem that the management is exercising excellent judgment in protecting the company as far as possible from heavy losses which might result if a period of falling prices should find them with a heavy inventory of goods. Also, it is not unlikely that the company may have created good will among its customers by the price concessions which it has made, thus building up future trade.

There are other comparisons for which such a statement furnishes the basis, but the foregoing discussion should furnish a sufficiently clear idea of the uses which may be made of such a statement, as well as the advantages of expressing the important items on such a statement in terms of percentages of gross sales.

The statement of receipts and disbursements. Another form of report which may well be presented is a statement of cash receipts and disbursements. As explained in the chapters dealing with the cash records, information of this nature is usually analyzed in sufficient detail in the cash journals, so that a glance at the footings of their columns would yield rather complete information. This does not mean, however, that a report of this nature may not be worth while to the management, who can hardly be expected to draw their information from the books of original entry.

Such a statement would not be at all complex in form, and does not require any lengthy discussion. It would ordinarily be prepared monthly, and would be more valuable if presented in comparative form. Such a form might well provide the basis of comparison between receipts and expenditures for the current month with those of each previous month in the current year, and possibly with those of the same month in one or more previous years. For purposes of illustration the form may be shown for a single month. Such an illustration follows:

WILSON AND COMPANY

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE MONTH ENDED JANUARY 31, 1920

Balance, January 1, 1920		$24,275.00
Receipts:		
Accounts receivable	$78,500.00	
Cash sales	24,700.00	
Notes receivable	8,500.00	
Loans secured from banks	10,000.00	
Sale of mortgage bonds	50,000.00	
Interest on notes receivable	350.00	
Miscellaneous	1,200.00	
Total receipts		$173,250.00
Total accountability		$197,525.00

Disbursements:		
Accounts payable	$63,000.00	
Notes payable	32,500.00	
Interest on notes payable	1,300.00	
Operating expenses	9,800.00	
Non-operating expenses	2,750.00	
Purchase of delivery equipment	1,750.00	
Paid contractor (new building)	27,000.00	
Total disbursements		138,100.00
Balance, January 31, 1920		$ 59,425.00

A few transactions are purposely assumed to have occurred in this month which would not occur every month, or in the ordinary course of operation. Thus the company is assumed to have received money from the sale of its bonds and to have applied part of this in paying the contractor who is constructing their new building, for the construction of which the bonds were presumably issued. This and the purchase of some additional delivery equipment are the only items which do not represent the regular monthly routine business operations.

QUESTIONS FOR CLASS DISCUSSION

1. What is an "exhibit" in the accounting sense of the word? Name the "exhibits" usually prepared and explain the use of each. Discuss the importance of each with relation to the others and with relation to other forms of reports that might be prepared.
2. Businesses today maintain more elaborate accounting systems than they did a few years ago, so that there is considerably more data available with respect to the financial condition and operations of the typical business now than there was formerly. But the balance sheets and statements of profit and loss published now are considerably more brief than those published a few years ago. How do you account for this? Does it mean that there is less information available in the published reports of businesses now than formerly?
3. Assume that every item shown by the reports of Taylor, Johnson and Company were five times as large. Would this make desirable any modifications in the forms of the "exhibits" prepared for that company? On the basis of the foregoing assumption, what "schedules" and "analytical statements" should accompany the three "exhibits"?

4. Who are the interested parties to be served by the reports of Taylor, Johnson and Company, as outlined by you in answer to Question 3? Would the information furnished by these reports be all that is required by the government for purposes of the Federal Income Tax? Would it be all that is required by a banker to whom the company is applying for a loan? Would it completely answer the requirements of the sales manager? the treasurer? Discuss.
5. Should you expect the stock of this company to be quoted on the market on December 31, 1920, at a higher or a lower figure than on December 31, 1919? Give reasons for your answer.
6. Do you agree with all the conclusions stated in the discussion given above in connection with the comparative balance sheet of Taylor, Johnson and Company? Can you point out anything of significance which was omitted from that discussion?
7. Suppose you are a banker and are asked to pass on the application of Taylor, Johnson and Company for a $30,000 loan for sixty days. Would you grant it? Give reasons for your answer.
8. Define or criticize the policy followed by the company mentioned above during the year 1920, as indicated by the three reports given above.

REFERENCES FOR FURTHER STUDY

Greendlinger, Leo, *Financial and Business Statements*, chaps. iii and iv.
Wildman, J. R., *Principles of Accounting*, chap. xlvi.
Dickinson, A. L., *Accounting Practice and Procedure*, chaps. ii and iii.
Hatfield, H. R., *Modern Accounting*, chaps. iii and xv.
Esquerré, Paul-Joseph, *Applied Theory of Accounts*, chaps. xxxv, xxxvi, and xxxvii.

CHAPTER XXXI

THE GRAPHICAL METHOD OF PRESENTING ACCOUNTING FACTS

Diversified reports required by management. In chapter xxx it was pointed out that the need of the management for information could not be satisfied by the balance sheet and the statement of profit and loss alone, or even by the additional financial reports discussed in that chapter. With the growth in size of the average business unit, and with the increased specialization of managerial functions, there has arisen the need for additional special reports for managerial use. An example of the need for such diversification of reports is found in the reports which are drawn up to show sales analysis. These reports must be so prepared as to show sales analyses on several bases, each such basis of analysis being determined by the kind of questions which some one of the functional managers wants answered. Thus the merchandise man, or purchase manager, might want a report classifying sales by commodities. The sales manager might desire reports classifying sales by territories, by salesmen, or on both these bases. The treasurer, whose problems are financial in their nature, might desire a report which would classify sales on the basis of the credit terms on which they had been made. And not only are reports of this sort needed, but also statements which make possible the comparison of such facts, as between branches or departments of the business, and as between different periods of time.

The use of statistical method. If these reports are to give the managers for whom they are prepared the information most desired by them, and in the most available form, it will be necessary for the accountant to call to his aid methods of presentation which are ordinarily termed statistical methods. The statistical method, in the best meaning of the term, implies the gathering, in numerical terms, of the information needed for answering a certain question or revealing a certain tendency, and the presentation of this information in as clear a manner as possible.

Thus if the sales manager of a large wholesale establishment wishes to know the ratio between expenditures incurred for advertising in a certain territory during a certain period of time, and the amount of the sales made in that territory during the same period, the answering of his query in a satisfactory manner will involve the use of statistical method. Assuming that the records of the business have been properly kept with a view to answering such a question, and that the information needed is therefore available, it might appear from these records that the sales made in X territory during November amounted to $72,000, while the advertising expense incurred during that month amounted to $6,000. Given this information, there are several methods by which it may be presented to the sales manager. Some possible methods of such presentation are:

1. A simple *memorandum* to the effect that the sales made in X territory during November amounted to $72,000, with an advertising expense of $6,000. This is a mere statement of facts with no attempt at interpretation. For this reason, if similar information is furnished in this form for all the sales territories, the full significance of the comparisons involved would not become evident to the executive without the expenditure of some time and energy on his part in studying the relationships expressed by the figures submitted.

2. A report to the effect that the sales made in X territory for November were twelve times the advertising expense incurred for that territory during that month. This is stating the answer in the form of a *ratio*, and is more suggestive than the first method, because a comparison between the two items is indicated.

3. A report to the effect that the advertising expense for X territory during November was $8\frac{1}{3}$ per cent of sales. This method is not very different from that of expressing the relation in the form of a ratio, but is preferable for the reason that it is somewhat easier to understand the meaning of percentages taken on a common base, the base here being the amount of sales. Thus if the sales manager desired also a comparison between sales and salesmen's salaries for the same territory and period, as he probably would, and the salesmen's salaries amount to $9,000, it would be better to report that advertising expense was $8\frac{1}{3}$ per cent and salesmen's salaries $12\frac{1}{2}$ per cent of sales than to report that sales were 12 times the first item and 9 times the second, since the percentage method affords not only a

comparison between sales and each of the two expense items but also a basis of comparison between the two items of expense.

4. A *chart* or *graph* indicating a comparison between the two items. Such a comparison might be expressed by means of two bars of equal width, the respective lengths of which would indicate the relationship between the two amounts in question, as follows:

CHART I

a, Sales in X territory—November

b, Advertising expense for X territory—November

This last method of presenting statistical data is known as the *graphic* method, and is particularly suitable for the presentation of certain types of information, as will presently appear.

Further illustration of the statistical method. To illustrate further the presentation of statistical data concerning business operations, it may be assumed that a certain department store keeps records which furnish the following information concerning the operations of each department: (1) gross sales; (2) sales returns and allowances; (3) net sales; (4) cost of goods sold; (5) gross profit on sales; (6) sales salaries; (7) advertising expense; (8) delivery expense; (9) general overhead expense (pro-rated to the department); (10) net operating profit.

Assuming further that the records are kept in such a manner as to make this information available by months, the information concerning the operations of a given department for a year may be tabulated to show each of these items for each month of the year, thus making it possible to compare different items for the same month, and also to compare the amount of a given item for one month with the amount of the same item for any other month. Such a tabulation, showing the facts with regard to the operations of Department A for the year ended December 31, 1919, is shown on page 368.

There are several comparisons which may be made on the basis of the information furnished by the foregoing tabulation, as well as

several ways in which such comparisons may be presented. For example, if it is reported that gross sales for January were twenty times the amount of advertising expense, for February thirty-one and one-tenth times that item, and so on for the remaining months, this would be expressing comparisons between these two items for different months of the year in terms of *ratios*. These ratios could then be shown for each month to afford a comparison of the ratios for different months of the year, as follows:

RATIO OF GROSS SALES TO ADVERTISING EXPENSE, DEPARTMENT A

FOR YEAR ENDED DECEMBER 31, 1919 (BY MONTHS)

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	For Year
21	33.1	50.3	30	25	40.2	50	25.8	21.3	26.3	32.7	17	27

Assuming that gross sales is taken as the basis of comparison, a comparison between this item and any other of the items previously mentioned may be shown by the method just indicated. For example, the ratio of gross sales to cost of goods sold, or to sales salaries, may be shown for the year, and for each month in the year.

Another method by means of which different items may be compared for any one month is the use of percentages, as indicated in the earlier discussion. Thus, taking the gross sales for the month as the base figure, or 100 per cent, it is possible to show other items for that month in terms of their percentages of gross sales. This method of comparison may be illustrated by a table showing gross sales, sales returns and allowances, net sales, cost of goods sold, and gross profit on sales, for the first three months of the year, expressed for each month in terms of the percentage of each item of the amount of gross sales for that month. In practice such a table would probably be extended to include all the items listed in the table given and to cover all of the twelve months of the year. The method employed, however, is sufficiently well indicated by the partial tabulation shown on page 369.

The graphic method illustrated. Still another and very useful method of presenting statistical information is by means of charts,

SALES, OPERATING EXPENSES, AND NET OPERATING PROFIT OF DEPARTMENT A

FOR THE YEAR ENDED DECEMBER 31, 1919

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Gross sales	105,000	99,400	90,500	105,200	100,400	96,600	95,000	103,200	106,800	101,000	99,400	115,600	1,218,100
Returns and allowances	6,200	5,000	4,200	6,000	6,400	5,600	4,200	6,400	5,600	5,400	5,000	6,400	66,400
Net sales	98,800	94,400	86,300	99,200	94,000	91,000	90,800	96,800	101,200	95,600	94,400	109,200	1,151,700
Cost of goods sold	68,500	67,600	63,500	69,000	65,000	63,400	64,000	70,400	67,400	68,400	67,200	71,000	805,400
Gross profit	30,300	26,800	22,800	30,200	29,000	27,600	26,800	26,400	33,800	27,200	27,200	38,200	346,300
Sales salaries	6,800	6,200	5,000	7,000	6,400	5,800	5,200	6,000	7,000	5,800	5,400	7,400	74,000
Advertising	5,000	3,000	1,800	3,500	4,200	2,400	1,900	4,000	5,000	3,800	3,600	6,800	45,000
Delivery expense	900	800	840	1,000	900	860	780	940	900	940	860	1,100	10,820
General overhead expense	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	6,200	62,00	6,200	74,400
Total operating expense	18,900	16,200	13,840	17,700	17,700	15,260	14,080	17,140	19,100	16,740	16,060	21,500	204,220
Net operating profit	11,400	10,600	8,960	12,500	11,300	12,340	12,720	9,260	14,700	10,460	11,140	16,700	142,080

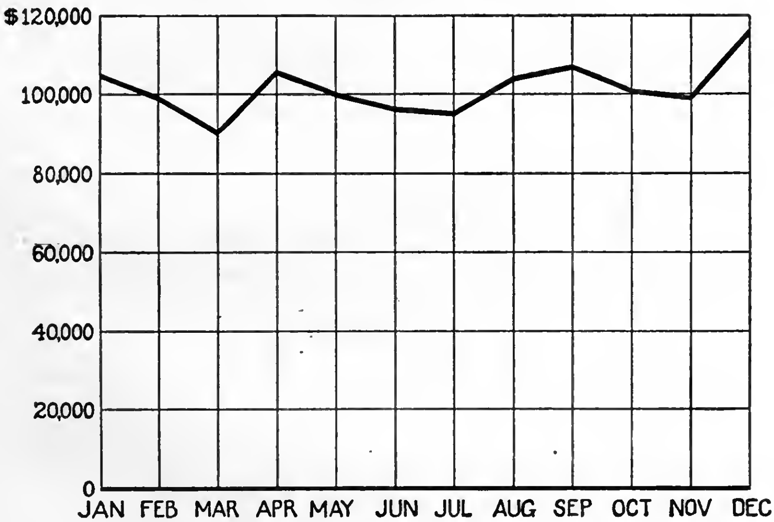
DEPARTMENT A

PERCENTAGES TO GROSS SALES OF RETURNS AND ALLOWANCES, NET SALES, COST OF GOODS SOLD, AND GROSS PROFIT ON SALES, FOR THE FIRST THREE MONTHS OF THE YEAR ENDED DECEMBER 31, 1919

	PERCENTAGES		
	January	February	March
Gross sales	100.0	100.0	100.0
Sales returns and allowances	5.9	5.03	4.6
Net sales	94.1	94.07	95.4
Cost of goods sold	65.2	68.0	70.1
Gross profit on sales	28.9	26.07	25.3

curves, or graphs, in such a way as to appeal directly to the eye. This method may be illustrated first by the use of what is known as the *curve*. Several types of curves are employed by statisticians and for different purposes, but the curves which will be made use of in the following illustrations are of a very simple type, and all deal with the same sort of data after the same manner.

CHART II



Department A—Curve showing Gross Sales (by months) for the year ended December 31, 1919.

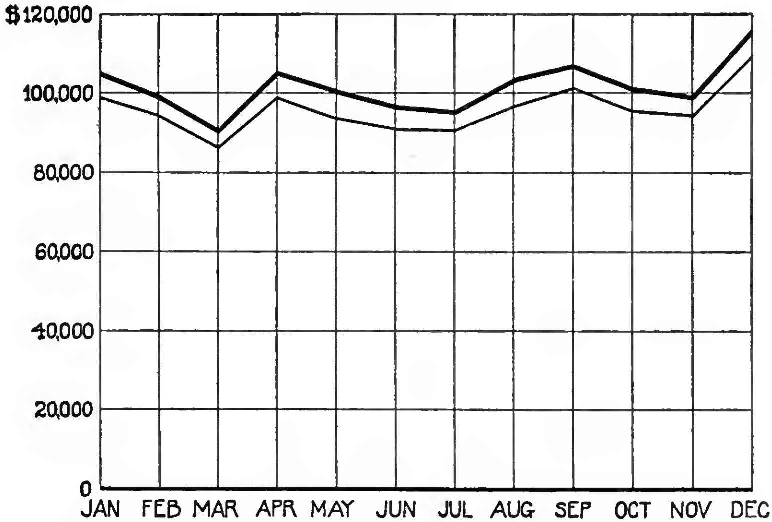
The foregoing illustration shows a curve for the gross sales of Department A, plotted by months, for the year 1919. An examination of this curve indicates that sales in this department were high during the January and February sales, lower in March, climbing again in April and May, high in the August sales, higher still in September, after which they fall off somewhat, but reach their peak during the holiday season.

This curve, showing the comparison of sales by months for a single year, at once suggests several other interesting comparisons. Thus it would evidently be interesting to see how the sales of the preceding year, plotted by months, on the same base and to the same scale, would compare with those of the current year. To prepare such a curve, however, it would be necessary to assume a considerable amount of additional data. It will therefore be omitted, though with a full recognition of its value for purposes of comparison.

Comparison of gross sales with net sales. In the tabulation previously given of the more important data concerning the operations of Department A for the year, it will be noted that the gross sales and the amount of sales returns and allowances are given for each month, and that the amount of net sales for the month, which is the difference between the two, is shown as the third item. The manager is apt to be concerned with the fluctuations of the sales returns and allowances in relation to the gross sales, and the relations between gross sales and net sales for each month. Two curves may be plotted for his inspection, the first showing a comparison between gross sales by months and sales returns and allowances by months, the second showing a comparison between gross sales and net sales, both by months. The second would to some extent serve the purposes of both, since the variations that will be shown by this curve between gross sales and net sales from month to month will serve to indicate fairly well the fluctuations in the amount of sales returns and allowances. The first chart suggested will be omitted here, and only the second one shown for purposes of illustration (Chart III).

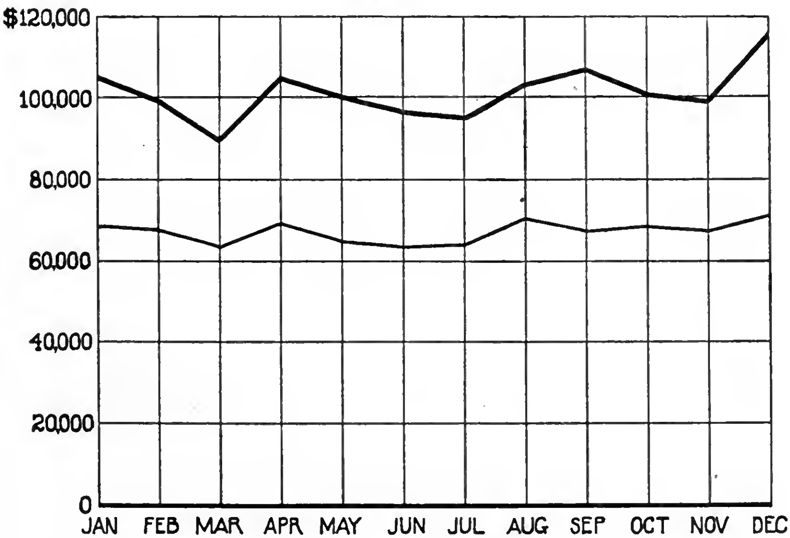
Comparison of gross sales and cost of goods sold. Another significant comparison that can be made on the basis of the data furnished by the table on page 368 is one between the gross sales by months and the cost of goods sold, also by months. Such a comparison is shown by the two curves on Chart IV, both of which are plotted on the same base and to the same scale.

CHART III



Department A—Chart showing comparison between Gross Sales and Net Sales (by months) for the year ended December 31, 1919.

CHART IV

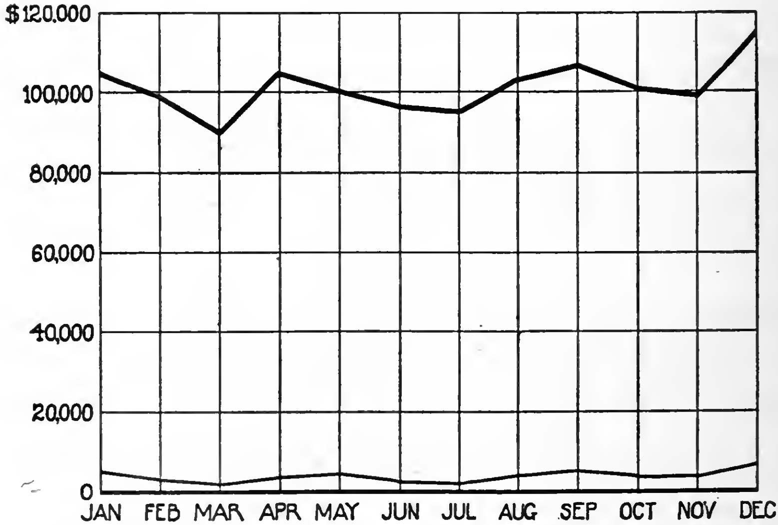


Department A—Chart showing comparison between Gross Sales and the cost of the goods sold (by months) for the year ended December 31, 1919.

An examination of the two curves shown on this chart shows a tendency toward a fairly close correspondence in the movements of the two lines. However, it is to be seen that the margin between the two fluctuates somewhat from month to month, not only in its amount but also in its relation to the amount of gross sales. Another valuable comparison would be shown by a chart on which was plotted the curves for net sales and cost of goods sold, both by months. In this case the margin between the two would represent the amount of gross profit on sales. Such a chart would reveal, for instance, that a high percentage of gross profit was realized in April, in September, and in December, as compared with that realized in the other months of the year.

Comparison of gross sales and advertising expense. It is altogether probable that the sales manager will desire a comparison between gross sales and the advertising expense incurred in making these sales, by months. Such a comparison is presented by the two curves shown on the following chart:

CHART V

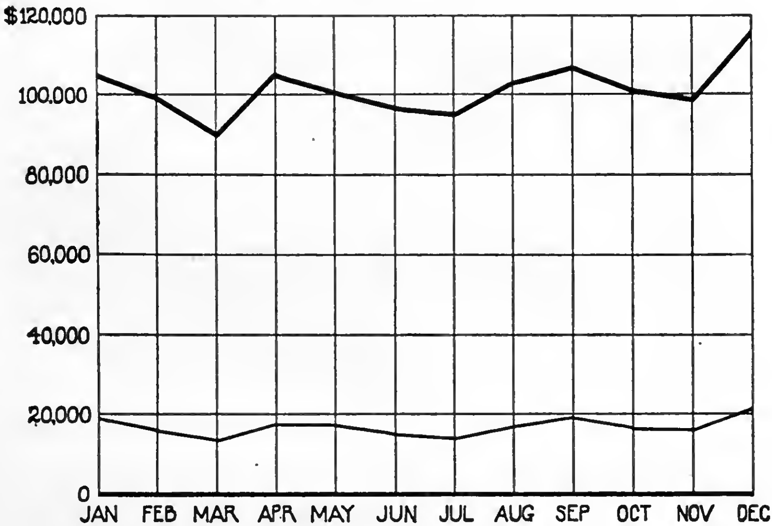


Department A—Chart showing comparison between Gross Sales and Advertising Expense (by months) for the year ended December 31, 1919.

It is at least evident from this chart that advertising expense has not been charged to this department on the basis of sales, since the fluctuations of the two curves are not always in the same direction. Thus in April the advertising expense is seen to be lower than in May, while the sales in April were higher than the sales for May.

Comparison of gross sales and operating expenses. Another desirable comparison is one between total sales and total operating expense. A chart showing such a comparison is given below.

CHART VI

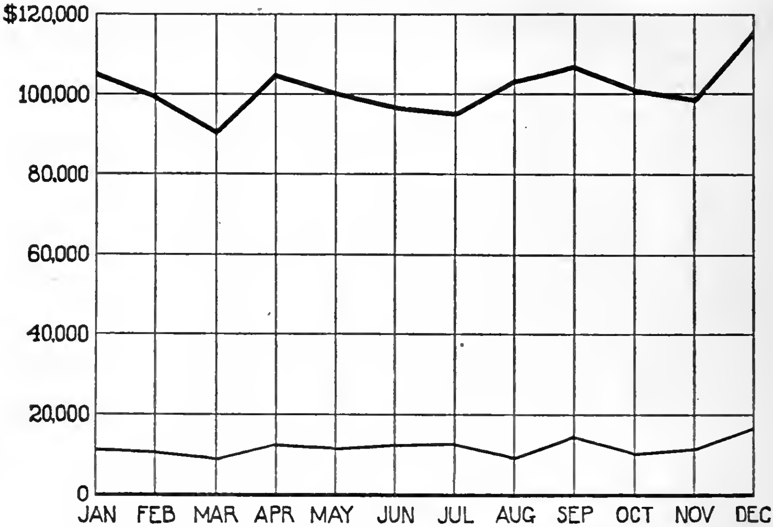


Department A—Chart showing comparison between Gross Sales and Total Operating Expense (by months) for the year ended December 31, 1919.

Inspection of the two curves reveals that in every month an increase in sales has been accompanied by an increase in operating expense and vice versa, though not always in the same proportion. Any questions which may be raised by a study of this chart will require a reference to the table in which the analysis of operating expense by months is shown, and will probably require an investigation which will demand information of an even more detailed nature.

Comparison of gross sales and net profit. A comparison of gross sales by months with net operating profits by months is shown in the following chart:

CHART VII



Department A—Chart showing comparison between Gross Sales and Net Operating Profit (by months) for the year ended December 31, 1919.

The amount of net operating profit fluctuates more sharply from month to month in proportion to its size than does the amount of gross sales. This is quite to be expected, and may be explained by a study of the fluctuations in the amounts of the various items which were to be deducted from the amount of gross sales before arriving at the net operating profit.

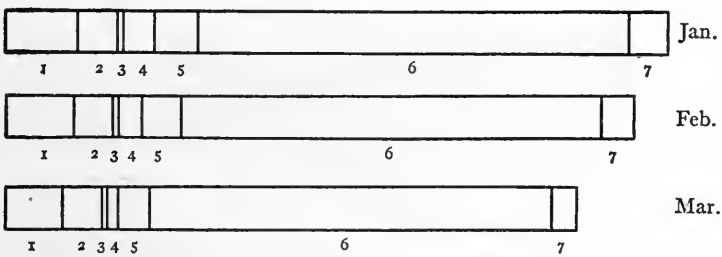
Other methods of graphical presentation. Another means of showing a comparison between figures graphically is by the use of bars or rectangles of similar width, whose length furnishes the basis for comparison. A case in which this method might well be employed is found in the comparison of total sales for the current year with total sales for the preceding year. Assuming gross sales for the preceding year to have been $1,011,000, and ascertaining the sales for the current year to total $1,208,100, such a comparison is shown by the following chart:

CHART VIII

Department A—Chart showing comparison between total sales for year ended December 31, 1919, with total sales for year ended December 31, 1918.

The rectangle or bar can also be used as a device for showing a comparison of parts with the whole which they make up. For example, if the gross sales for January are taken as the whole with which its parts are to be compared, a rectangle may be drawn to scale to show by its length the amount of this total. This rectangle may then be divided into cross-sections, the length of each representing the amount of one of the deductions which must be made from gross sales before net profits can be ascertained. The last remaining cross-section will represent the amount of such net profits. Still another basis of comparison is furnished if similar rectangles are drawn for the other months of the year, all drawn to the same scale and divided in a similar manner. This use of the bar or rectangle in graphic presentation is illustrated by the chart which follows:

CHART IX



Department A—Chart showing relative amounts of gross sales, deductions from sales, operating expenses, and net operating profit (by months) for the first three months of the year ended December 31, 1919.

1. Net operating profit
2. General overhead expense
3. Delivery expense
4. Advertising expense
5. Sales salaries
6. Cost of goods sold
7. Returns and allowances

Advantages of the graphic method. A few simple illustrations have been presented and discussed in this chapter. These illustrations of the graphic method of presenting business statistics are perhaps not numerous or varied enough to be really representative, but they do serve to reveal certain advantages, as well as certain weaknesses, of this manner of presentation. The more obvious advantages may be listed as follows:

1. The graphic method of presenting facts appeals directly to the eye, and is sure to command attention.

2. It brings out comparisons or tendencies in a more striking manner, and renders the facts shown easier of interpretation than do other methods.

3. A busy executive can review in a given time a much greater amount of information presented in this form than if this information were presented in some other form.

4. By the use of curves it is easier to show a continuity of certain tendencies over a period of time than it is to show such continuity by other methods.

Limitations of the graphic method. From a careful consideration of the illustrations given in the preceding pages of this chapter, it should become apparent to the student that the graphic method has not only its advantages but also certain limitations. The limitations of the use of the graphic method which most readily suggest themselves are as follows:

1. Only a very limited range of information can be presented to advantage on one chart. This can be readily seen by comparing the information presented by any one of the several charts illustrated above, or by all of them, with the amount of information furnished by the single table upon which they are all based.

2. While showing certain tendencies very clearly, the chart does not usually furnish exact information in such a form as can be readily stated in terms of definite numbers. In other words, a chart cannot be easily quoted. Graphic presentation of facts is usually not sufficient in itself, but needs to be supplemented by figures. Thus, in the last preceding illustration there is shown comparisons of: (1) totals, and (2) the parts into which those totals may be divided. A little study of this chart will show that it will be much more enlightening if each section of each bar there shown is also marked to indicate the

number of dollars represented by such section, and also the percentage of the whole which such section represents.

3. The amount of training and caution necessary for the proper use of the graphic method. This is necessary:

a) On the part of the one submitting the report. A variation in the base, the scale, or the basis of comparison may create a very different impression with regard to a given set of facts, and if not wisely and honestly done may be very misleading.

b) On the part of the one to whom the report is submitted for inspection and interpretation. If such reports are drawn in a fashion tending to be misleading, they are more misleading than almost any arrangement of the actual figures could be. Only one who is trained in the use and interpretation of statistics would know enough to avoid reading a wrong meaning into charts which are carelessly, ignorantly, or dishonestly prepared.

Summary. In rendering reports with regard to various phases of business activity to the managers and other interested parties, the accountant should make use of the most scientific methods of presenting such information available for his use. This means that the successful accountant must have a working knowledge of statistical method. One very useful way of bringing information to the attention of those for whose use it is collected is by means of "graphs" or charts, which present such information graphically or pictorially. This method possesses certain very evident advantages, but it must be used with understanding and with caution. Where the graphic method of presentation is employed, it should generally be used in connection with and supplementary to statistics which are tabulated or otherwise reported in such a manner as to show the exact quantities involved, thus retaining the good features of both methods of presentation and avoiding so far as is possible their dangers.

QUESTIONS FOR CLASS DISCUSSION

1. Assume that you are sales manager of the Way Sagless Spring Company, a manufacturing concern turning out three lines of product. The company advertises nationally, and sells to dealers all over the United States. Sales are made by salesmen and by mail, by means of catalogues. The sales teritory is divided into five parts, with a subordinate sales manager for each territory. Outline the information

which you should expect the accounting department to furnish you each month.

2. How much of the information shown in your outline could be advantageously shown in graphic form? Make a list of such charts as you would ask to have prepared. What use could advantageously be made of percentages?
3. Assume that you are traffic manager for the Way Sagless Spring Company. What statistical data would be useful to you in planning your work? Can you suggest any charts that would be useful to you in this capacity?
4. To what member of the organization would each of the charts shown in chapter xxxi probably be most useful? Prepare a memorandum to accompany each of the charts there shown, calling attention to what you consider the most significant thing shown by each such chart.
5. You are appointed head of the accounting department of a wholesale hardware business which has six departments and makes sales in fifteen states. You wish to employ an assistant who is an expert statistician, but this represents an innovation and the general manager is rather doubtful as to its wisdom. Prepare a memorandum to the general manager, in which you attempt to justify your proposal to employ such an assistant.
6. Assume that you have succeeded in getting your statistician, and that he has been supervising the preparation of tables and charts for the use of various members of the staff. The sales manager finds the charts very helpful, and suggests that it would be a saving of his time if the reports intended for him should be presented in graphic form exclusively. Should you accede to this suggestion? Prepare a memorandum on the subject, addressed to the sales manager.

REFERENCES FOR FURTHER STUDY

Greendlinger, Leo, *Financial and Business Statements*, chap. ii.

Copeland, M. T., *Business Statistics*, chap. i, and pp. 254–61, 267–72, 381–86.

Franklin, B. A., *Cost Reports for Executives*, chap. vii.

APPENDIX

W. C. Harvey's business has been expanding at such a rate that he considers it desirable to have a considerably larger capital, and also to have another person associated with him in its management. He therefore enters into an agreement with H. P. Simmons to form a co-partnership under the name of Harvey and Simmons for the purpose of dealing in hardware and house furniture.

It is agreed between them that the capital of the partnership is to be $30,000. In view of the successful start made by Mr. Harvey, and the desirable relations already established by him, Mr. Simmons agrees to accept Harvey's present investment at its book value, and to allow him to include in the statement of his assets an item of good-will sufficient to bring his investment up to $10,000.00. Harvey is to contribute an additional $5,000.00 in cash, and Simmons is to contribute $15,000.00, half of which must be in cash, and the remainder in cash or high-grade collateral.

The articles of co-partnership subscribed to by the two parties to the agreement are as follows:

ARTICLES OF CO-PARTNERSHIP

These Articles of Agreement, made and entered into this first day of June, one thousand nine hundred and eighteen, by and between W. C. Harvey, of the city of Chicago, party of the first part, and H. P. Simmons, of the same place, party of the second part,

Witnesseth, as follows:

1. The said parties above named agree to become partners in the retail hardware and furniture business, located in the city of Chicago, under the firm name and style of Harvey and Simmons, said partnership to continue for five years from the date hereof.

2. The capital of the said partnership shall consist of thirty thousand dollars ($30,000.00), contributed as follows: W. C. Harvey to contribute his present retail hardware and furniture business, conducted by him him at 6540 Kinzie Avenue, said business to be valued at ten thousand dollars ($10,000.00), including the good-will, and five thousand dollars ($5,000.00) additional in cash; H. P. Simmon to contribute fifteen thousand dollars ($15,000.00), seven thousand, five hundred dollars ($7,500.00) of this to be in cash, and the remainder in cash or collateral which shall prove acceptable to W. C. Harvey. The said contributions are to be employed as a common fund in the conduct of the business, for their mutual benefit and advantage.

3. During the continuance of the partnership herein mentioned, each of the partners shall give his time, skill, and attention to the business, and exert his best powers for their joint interest, profit, benefit, and advantage, and truly buy, sell, and trade with their joint stock, and the increase thereof in the said business.

4. The partners shall bear, pay, and dicharge between them all expenses of the business; all losses and all gains arising from the conduct of the business shall be borne and divided between them equally, share and share alike.

5. For the time, skill, and attention given to the business W. C. Harvey shall receive the sum of two hundred and twenty-five dollars ($225.00) per month, and H. P. Simmons the sum of two hundred dollars ($200.00) per month, said sum in both cases to be charged to the salaries account.

6. Each of the partners shall be credited with interest at 6 per cent per annum on his capital investment, the amount of said investment to be taken as of the first of each month. The amount of such interest accruing to each partner shall be credited to that partner's personal account at the end of such month.

7. No withdrawals in excess of salary, interest earned, and profits may be made by either partner without written consent of the other. Upon such withdrawals, if made, the partner making them shall be charged 6 per cent per annum until such deficit shall be made good.

8. All the transactions of the partnership shall be truly entered in double entry books of account, and the same are to be audited periodically by a certified public accountant. On the thirty-first day of December of each year the books shall be closed by a certified public accountant, and the net profit or net loss for the year ascertained and apportioned.

9. The said parties hereby mutually agree that during the continuance of the said partnership neither of them shall indorse any note, or become surety for any person, without the written consent of the other partner.

10. And it is finally agreed that at the termination of the said partnership the said partners, each to the other, shall and will make a true, just, and final account of all things relating to their said business, and in all things truly adjust the same; and all the stock, as well as the gains and increase thereof, which shall appear to be remaining, either in money, goods, wares, fixtures, debts, and otherwise shall be equitably divided between them.

In Witness Whereof, the parties hereto have hereunto interchangeably set their hands, the day and year first above written.

W. C. Harvey (L.S.)
H. P. Simmons (L.S.)

New features to be employed in the accounting for June. Owing to the rapidly expanding volume of the business, you have advised the partners to make use of certain more advanced methods in keeping the records of their business. They give you a free hand in the matter, and ask you to instal any new features that you consider desirable. You make the following modification in the system as at present existing:

1. Provision for further analysis in the sales journal.

2. Inclusion in the purchases journal of all purchases on account, whether of merchandise or not.

3. The employment of a petty cash fund, to be kept by the Imprest System.

4. The use of the cash disbursements journal to record only checks issued. All payments in currency are made from the petty cash fund.

5. The use of sales and credit slips as a basis for entries and also in posting to customers' accounts, and the use of the purchase invoices and other vouchers for posting to creditors' accounts.

6. A slight modification in the columns used in the cash receipts journal.

1. *Additional analysis of the sales journal.* It is desired to show in the sales journal not only the total of the sales for each department, but also the amount of cash sales for each department and of credit sales for each department. Since, as will be explained below, posting to the customers' accounts will now be done directly from the sales tickets, the posting from the sales journal will be only through the footings of columns. The columns required will therefore be as follows: (1) Date, (2) Explanation, (3) Accounts Receivable, Dr., (4) Cash, Dr., (5) Charge Sales Hardware, Cr., (6) Charge Sales Furniture, Cr., (7) Cash Sales Hardware, Cr., (8) Cash Sales Furniture, Cr., (9) Total Hardware Sales, Cr., Total Furniture Sales, Cr.

This arrangement is made for the purpose of obtaining more analysis. As regards the posting to the ledger accounts, only three of the columns will be posted. They are (*a*) Accounts Receivable, Dr., (*b*) Hardware Sales, Cr., (*c*) Furniture Sales, Cr. The debit to cash will be made in the cash receipts journal.

2. *Modification of purchases journal.* All purchases on account, whether of merchandise or not, will henceforth be recorded in the purchases journal, Accounts Payable being debited for all such credit purchases. The columns in the purchases journal will be as follows: (1) Date, (2) Name, (3) Address, (4) Terms, (5) Invoice Number, (6) Folio, (7) Accounts Payable, Cr., (8) Hardware Purchases, Dr., (9) Furniture Purchases, Dr., (10) Sundry Accounts, Dr., (*a*) Name, (*b*) Folio, (*c*) Amount.

The posting from this book is all done through the footings of columns, except the debits to such ledger accounts as are not provided for by special columns, and which are entered under "Sundry Accounts, Dr."

The credits to individual creditors' accounts will be posted direct from the purchase invoices, and for purposes of this exercise this posting may be taken for granted and ignored.

3. *Use of the imprest system for petty cash fund.* All cash received by the business is to be deposited and to be disbursed only by check. This necessitates some device by which small currency payments may be made. This matter is to be taken care of by means of a petty cash fund. This fund will be established by drawing a check for the amount of the fund, entering the amount of such check in the cash disbursements journal as a debit to petty cash. This check will be cashed by the custodian of petty cash, who will disburse the money as required, taking a voucher for each disbursement, and keeping a record of all such disbursements and the accounts to be debited in a subsidiary journal known as the petty cash book. When the fund needs replenishment, the petty cashier will present to the proper authority a statement of the amount disbursed, analyzed according to the accounts to be debited, and accompanied by all the vouchers for such disbursements, and a check will be drawn for the amount necessary to bring the petty cash fund up to its original figure. The entry in the cash book will be a debit to each of the accounts shown on the statement submitted by the petty cashier, and a credit to cash. Thus in this system the petty cash book will not be used as a posting medium, and the petty cash account will be neither debited nor credited after the first entry setting up the debit for the amount at which this account is to be maintained.

The student is expected to keep a record of petty cash expenditures and to make the record for the replenishment of this fund whenever it runs low.

The petty cash book may have the following columns: (1) Date, (2) Name and Explanation, (3) Receipts Check No., (4) Disbursements Voucher No., (5) Petty Cash, Dr., (6) Petty Cash, Cr., (7) Office Expense, Dr., (8) Delivery Expense, Dr., (9) Other Selling Expense, Dr., (10) Sundry Accounts, Dr., (*a*) Name, (*b*) Amount.

4. *The cash disbursements journal.* The form of cash disbursements journal used in this exercise is the same as the one used in Exercise 33, and in posting from this book the same procedure will be followed as in that exercise.

5. *The use of sales and credit slips.* As stated above, in this system neither charge sales nor cash sales will be entered by individual transactions, but will be entered at the close of each day's business as totals, the amounts being arrived at through the sorting and adding up of the sales tickets. These tickets will be sorted and entered on the basis indicated above in the discussion of the analysis of sales. The total debit to cash from cash sales will also be entered in the cash book each day. The posting to the customers' accounts will be made from the sales tickets themselves.

Similarly, all credits to customers will be entered on the books of original entry at the close of the day's business by means of a summary of the day's credit slips, while the posting to the credit of individual customers will be made directly from the credit slips themselves. Thus the total credits to customers for collections made will be entered in the cash book, while credits for returns will be summarized in the sales returns and allowances journal.

It will be left to the student to design a form of sales returns and allowances journal that will show the same analysis of sales returns and allowances that is shown for sales in the sales journal. The only accounts to be posted from this journal are: (1) Accounts Receivable, (2) Hardware Sales Returns and Allowances, and (3) Furniture Sales and Allowances. However, the management desires to have the same analysis made in the book of original entry that is made of sales in the sales journal.

The form of purchase returns and allowances journal which was used last month will serve equally well for this month.

6. *Form of cash receipts journal.* It has been agreed upon that discounts will be granted the purchasers of certain classes of furniture for payment within a specified number of days, and provision therefore must be made in the cash receipts journal for cash discount on sales. In addition to this change in its arrangement, certain other slight changes are thought desirable, so that the new form of this book shows the following columns: (1) Date, (2) Account Credited, (3) Explanation, (4) Folio, (5) Sundry Accounts, Cr., (6) Notes Receivable, Cr., (7) Cash Sales, (8) Accounts Receivable, Cr., (9) Cash Discount on Sales, Dr., (10) Interest, Dr., (11) Cash, Dr.

The method of posting from this book is the same as that employed in posting the form used last month, except that the credits to customers are no longer posted from the cash book, but directly from the credit slips.

The student will not be required to keep a customers' ledger in connection with this exercise, and will not be given the information which would enable him to do so. The creditors' ledger may also be omitted from the exercise, though the student may find it necessary for his own use to keep some memoranda concerning the amounts due to individual creditors. Only the summaries of sales and collections and other credits to customers will be furnished in this exercise.

TRANSACTIONS FOR JUNE

June 1 (Saturday)

W. C. Harvey deposits a check for $5,000.00 to the credit of the new firm of Harvey and Simmons. Simmons makes his contribution to the partnership capital, as follows: (*a*) $3,000.00 in American Telephone and Telegraph 6 per cent gold bonds, valued at par plus accrued interest (from April 1);

(*b*) $4,000.00 in Swift and Company's two-year 6 per cent gold notes, at par, plus accrued interest since April 1; (*c*) The remaining part of his $15,000.00 investment is in the form of a certified check on the Corn Exchange Bank. Charge sales: hardware, $95.00; furniture, $75.00. Cash sales: hardware, $63.00; furniture, $40.00. Received from customers on account, $145.00. Paid pay-roll as follows: bookkeeper, $25.00, one sales clerk at $30.00, and one at $25.00, a driver at $25.00, and a boy for general work, $18.00.

June 3

Paid H. Flanagan rent of store for May, $125.00. Drew a check for $50.00 to set up a petty cash fund. Received invoice from American Furniture Company, Milwaukee, for furniture, $1,200.00, 2/10/60. Paid freight on this shipment, $60.00. Collections on account, $105.00. Charge sales: hardware, $78.00; furniture, $110.00. Cash sales: hardware, $65.00; furniture, $25.00. Petty cash disbursements: mending office chair, $3.00; new ribbon for typewriter, $1.25.

June 4

Received invoice of hardware from Simmons Hardware Company, $1,350.00, 2/10/30. Received invoice from Muskegon Motors Company for new motor truck, $950.00, n/15. Sold the old truck for $345.00. Paid W. D. Allen Company's invoice of May 25, less discount. Collections on account, $95.00. Charge sales: hardware, $125.00; furniture, $105.00. Cash sales: hardware, $97.00; furniture, $40.00. Petty cash disbursements: towels, $4.50; drinking water, $2.25; carfare for deliveries, $0.75.

June 5

Purchased, from Ackley Brothers, building and lot at 6375 Kinzie Ave., for $14,000.00. (Building $10,000.00, lot $4,000.00.) Borrowed $8,000.00 from Chicago Realty Loan Company on our note for five years at 6 per cent, secured by a first mortgage on the property. Gave Ackley Brothers a certified check for $14,000.00. Collections on account, $145.00. We have adopted the policy of allowing cash discounts as an inducement to prompt settlement on purchases of furniture on account. Customers are at this time credited with $4.00 for such discounts, making the total credit $149.00. Charge sales: hardware, $107.50; furniture, $115.00. Cash sales: hardware, $82.60; furniture, $45.00.

June 6

Returned unsatisfactory goods to American Furniture Company, being credited by them with $145.00, the invoice price, and also for $6.00 freight paid by us on the goods. The following bills were paid: Chicago Telephone Company, rent of telephone for June, $6.00, and

for telegrams, $12.70; Commonwealth Edison Company, light, $7.42; Marquette Garage, for care of car, $35.50. Customers are credited for $135.00, $131.50 of this being for cash and $3.50 for cash discounts. Paid Western Supply Company's invoice of May 23. Petty cash disbursements: office supplies, $8.50. Charge sales: hardware, $78.50; furniture, $110.00. Cash sales: hardware, $87.00; furniture, $35.00.

June 7

Charge sales: hardware, $98.50; furniture, $175.00. Cash sales: hardware, $87.20; furniture, $22.50. Credited customers for a total of $149.00; $142.00 for cash, and $7.00 for cash discount on sales. Petty cash disbursements: mending office clock, $3.00; new waste baskets, $2.50.

June 8

Paid salaries the same as last week. Harvey drew $60.00 for personal use. Simmons drew $50.00. Received invoice of hardware from Butler Brothers, $500.00, 2/10/30. Petty cash: stamps, $20.00. At this point the petty cash fund should be replenished. A voucher will be made out for the amount expended since the fund is established, and showing the distribution to the accounts to be debited. A check will be drawn for that amount. Charge sales: hardware, $150.00; furniture, $112.50. Cash sales: hardware, $85.00; furniture, $75.00.

Note.—In order to simplify the problem, and relieve the student of unnecessary routine work, all sales and collections will be hereafter stated in totals at the end of each week.

June 10

Gave check to Red Cross for $40.00. Purchased an adding machine from the Burroughs Company, $350.00, giving them our check for the amount. James Freeman paid his note of April 10 for $200.00, with interest at 6 per cent. Paid Fred Hanson $125.00 for certain repairs on our newly purchased building, these repairs being necessary before the building could be occupied. Petty cash: express on goods shipped to a customer, $3.00.

June 11

Received invoice from Boutell Furniture Company, $950.00, 2/10/30. Cash refund to H. A. Howard, a customer, for furniture returned, $55.00. (Voucher and draw check.) Paid the Commercial Lithographing Company $75.00 for advertising material. Paid, from petty cash fund, $2.25 express on this material.

June 12

Paid balance due on American Furniture Company's invoice of June 3, less discount on all except $145.00, the invoice price of the goods returned. The freight allowance counts as a cash payment. Received invoice

from W. D. Allen Company, $1,200.00, 2/10/30. Paid Pennsylvania Railroad Company's freight bill of $49.50, $32.00 in-freight on furniture, and $17.50 being for in-freight on hardware. Petty cash: stamps, $10.00; brooms, $3.00.

June 13

Paid William Burns, contractor, $750.00 for work done on our newly purchased building to adapt it to our purposes. It is now ready for occupancy. Received, vouchered, and paid invoice from Western Safe Company for an office safe, $150.00. James Thompson, a customer who owed us $65.00 on account, has disappeared, leaving a number of unpaid bills, but no address.

June 14

Paid Simmons Hardware Company's invoice of June 4, less discount. Received invoice of furniture from Grand Rapids Chair Company, $1,100.00, 1/10/60. We are engaged in moving to the new building, and the store is closed today and tomorrow (Friday and Saturday).

June 15

Paid weekly pay-roll, same as last week. Each of the partners drew $50.00. Collections for the week were as follows: cash received, $487.20; cash discounts taken by customers, $16.40; total credit to customers, $503.60. During the week past we conducted a special sale preliminary to moving. Sales for the four days were as follows: charge sales, hardware, $724.00; furniture, $986.00. Cash sales: hardware, $662.00; furniture, $752.00. Paid Hamilton Transfer Company $150.00 for moving our stock and furniture. It is estimated that the work done by our own delivery truck in moving saved the firm $30.00.

June 17

Received notice from the Woodlawn Trust and Savings Company, with whom we discounted C. E. Pierce's thirty-day note for $300.00, with interest at 6 per cent, that this note has been dishonored at maturity, and has been protested. Sent them a check covering the face of the note, the interest, and a protest fee of $3.00. We notify John Fry, whose name appears on the note as indorser. We were successful in securing a tenant for the old store building, and received his check for $62.50, the rent for the second half of June. Paid the Smith Advertising Agency $250.00 to cover the cost of advertising for last week's sale.

June 18

Received John Fry's check to take up C. E. Pierce's note, including payment of interest and the protest fee. Paid Muskegon Motors Company's invoice of June 4, net. Received invoice from Barrett-Christie

Company, hardware, \$850.00, 1/10/30. Petty cash: advertising, \$6.50; stationery, \$8.00; stamps, \$10.00. Paid Butler Brothers, invoice of June 8, less discount.

June 19

Furniture returned to us for credit, \$65.00. Received invoice from Webster Manufacturing Company, furniture, \$1,250.00, 2/10/60. Paid in-freight on this shipment, \$35.00. Petty cash: new desk pads, \$1.00, supplies for trimming window, \$3.50.

June 20

Received invoice from Huron Supply Company for store supplies; \$150.00, n/30. Hardware returned for cash, \$8.50. This was paid out of the petty cash fund. Received credit memo from Grand Rapids Chair Company, noting a credit to us for furniture returned, \$200.00.

June 21

Paid Boutell Furniture Company's invoice of June 11, less discount. Bought of Chicago Office Supply Company, for cash, filing cases, \$65.00. Received invoice from Allegheny Coal Company for coal, \$525.00, n/30. This represents our coal supply for next winter, put in in advance.

June 22

Paid W. D. Allen Company's invoice of June 12, less discount. Payroll for the week vouchered and paid. Each of the partners drew \$50.00. Charge sales: hardware, \$514.20; furniture, \$705.50. Cash sales: hardware. \$428.60; furniture, \$374.80. Credits to customers: cash, \$312.50; cash discount on sales, \$13.50.

June 24

Our thirty-day note which was discounted by the Woodlawn Trust and Savings Company on April 25 was not paid at the date of maturity, May 25, but was renewed at that time, the old note being canceled, and a new one made for \$500.00, the amount of the old note, the new note being for thirty days, and bearing interest at 6 per cent. Through an oversight, no entry was made on the books at that time. The new note, which falls due today, is paid with interest. William Burns, contractor, has completed the construction of a garage on our lot back of the store building. We give him our check for \$1,500.00 to cover its cost. Paid \$60.00 insurance premium to cover insurance on our new garage for the next two years. Paid balance due on Grand Rapids Chair Company's invoice of June 14.

June 25

Received invoice from Muskegon Motors Company for equipment for the garage, \$85.00. Sent them our check for the amount. Henry Peters,

one of our sales clerks, is allowed to draw $15.00 in advance on this week's wages to enable him to meet the annual premium on his insurance. For convenience this is paid him out of petty cash.

June 26

Received invoice from the Standard Oil Company for hardware, $500.00, 1/10/60. Sales returns, for credit: hardware, $9.75; furniture, $25.00.

June 27

H. F. Lucas, the grocer whose store adjoins ours, has contracted for the use of a part of our garage space, at the rate of $25.00 a month. He pays the first month's rent in advance to bind the bargain Andrew Anderson, a customer who owes us $47.50 on account, has been declared a bankrupt, his property has been sold to satisfy labor claims, and he has left the city.

June 28

Paid to Illinois Central Railroad Company: in-freight, hardware, $23.40; in-freight, furniture, $42.75. Paid Barrett-Christie Company's invoice of June 18. Refunded to John Hanson $35.00 for furniture returned as unsatisfactory. Voucher and draw a check. Petty cash: stamps, $10.00; telegrams, $2.30.

June 29

Paid cartage bill for the month to Hamilton Transfer Company, $58.90. Paid salaries same as last week, less the $15.00 advanced to Henry Peters. Each of the partners drew $50.00. Charge sales: hardware, $530.00; furniture, $342.60. Cash sales: hardware, $615.75; furniture, $272.35. Credits to customers, for cash, $215.20; for cash discount, $18.90.

Inventories of merchandise are as follows: hardware, $5,342.00; furniture, $1,726.00.

It is decided to charge hardware with two-fifths of the cost of cartage and furniture with the remainder. It is estimated that one-tenth of the services of our own delivery equipment have been used in hauling freight from the station.

It is agreed to make an allowance of 1 per cent on charge sales for the period for loss from uncollectable accounts.

Depreciation on the various fixed assets is to be taken as follows: store building, 12 per cent annually; garage, 15 per cent annually; store equipment, 18 per cent annually; office equipment, 18 per cent annually; motor truck, 24 per cent annually.

Figure depreciation for the month on the total of each fixed asset as shown by the balance of the account at the end of the month, regardless of what time during the month the purchase was made.

Inventories of expense items are as follows: prepaid advertising, \$10.00; auto supplies, \$17.00; store supplies, \$32.50; office supplies, \$22.00.

Advertising payable is accrued, \$30.00.

Make all necessary adjustments for interest and for insurance premiums used and unused.

Credit each of the partners' personal accounts with his stipulated salary. It is estimated that Harvey spends three-fifths of his time in administrative work, and two-fifths in selling. Simmons is supposed to spend one-third of his time in the administrative work, and two-thirds in selling.

Instructions. Post to the ledger all entries for the month's transactions, and take a trial balance (preliminary trial balance). Then, with the aid of the data given above, prepare

1. A working sheet
2. A statement of profit and loss
3. A balance sheet

When this is done, make your adjusting entries in the journal, and post them to the ledger accounts. Then draft the closing entries in the journal, post, and rule up the accounts closed.

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